

NOTICE TO READER.

When you finish reading this magazine, place a 1 cent stamp on this notice, hand same to any postal employee, and it will be placed in the hands of our soldiers or sailors at the front. NO WRAPPING—NO ADDRESS.

A. S. BURLESON,
Postmaster General.

CALIFORNIA STATE BOARD OF HEALTH

MONTHLY BULLETIN



A "gas attack" at Camp Fremont. Ground squirrels are being exterminated throughout the entire vicinity of the big army camp by means of carbon bisulphide pumps and poisoned grain, as a part of the cooperation of the State Board of Health and the U. S. Public Health Service with the Army. These measures will give complete protection against the rather remote possibility of the entrance of bubonic plague, and will incidentally help protect stored foods and growing crops.

Q SANITATION ABOUT MILITARY CAMPS HEALTH OFFICERS' CONFERENCE

Q NOVEMBER, 1917

NOTICE.—The mailing list of the Bulletin is being revised. All persons who desire to continue to receive this publication, should at once sign and return the form on the last page of this issue.

California State Board of Health

MEMBERSHIP OF THE BOARD

GEORGE E. EBRIGHT, M. D., President	San Francisco
FRED F. GUNDRUM, M. D., Vice-President	Sacramento
WILBUR A. SAWYER, M. D., Secretary, Executive Officer	Sacramento
WM. LEMOYNE WILLS, M. D.	Los Angeles
EDWARD F. GLASER, M. D.	San Francisco
ADELAIDE BROWN, M. D.	San Francisco
ROBERT A. PEERS, M. D.	Colfax

BUREAU OF ADMINISTRATION, SACRAMENTO

WILBUR A. SAWYER, M. D.	Secretary and Executive Officer, DIRECTOR
KEMPER B. CAMPBELL, LL. M., Los Angeles	Attorney
L. B. MALLORY, A. B.	Assistant to the Secretary
GUY P. JONES	Morbidity Statistician
EDWARD T. ROSS	Sanitary Inspector

DISTRICT HEALTH OFFICERS

ALLEN F. GILLIHAN, M. D.	North Coast District, Santa Rosa
HAROLD F. GRAY, M. S., Gr. P. H.	Northern District, Chico
ROBERT N. HOYT, S. B.	Central Coast District, San Jose
RALPH W. NAUSS, M. D., Dr. P. H.	Central District, Fresno
EDWIN D. WARD, M. D.	South Coast District, Los Angeles
EDWARD A. INGHAM, S. B., C. P. H.	Southern District, Riverside

BUREAU OF COMMUNICABLE DISEASES

STATE HYGIENIC LABORATORY, BERKELEY

WILFRED H. KELLOGG, M. D.	Epidemiologist and DIRECTOR
FRANK L. KELLY, M. D., Gr. P. H.	Assistant Epidemiologist
WILLIAM B. HERMS, M. S.	Consulting Parasitologist
KARL F. MEYER, D. V. M.	Consulting Bacteriologist
CHAS. A. KOFOID, Ph. D.	Consulting Biologist
WM. W. CORT, Ph. D.	Associate Biologist
VIOLET M. BATHGATE, M. S.	Bacteriologist
GRACE A. MACMILLAN	Bacteriologist
IDA M. STEVENS, M. A. (P. H.), Los Angeles	Bacteriologist Southern Branch Laboratory
W. W. CROSS, M. D., Fresno	Bacteriologist Central Branch Laboratory
J. R. SNYDER, M. D., Sacramento	Bacteriologist Northern Branch Laboratory

BUREAU OF TUBERCULOSIS, SACRAMENTO

E. L. M. TATE-THOMPSON, B. L.	DIRECTOR
-------------------------------	----------

BUREAU OF VENEREAL DISEASES, SAN FRANCISCO

HARRY G. IRVINE, M. D.	DIRECTOR
ETHEL M. WATTERS, M. D.	Sanitarian
MARIAN LYNNE	Social Service Director

BUREAU OF VITAL STATISTICS, SACRAMENTO

GEORGE D. LESLIE, Ph. B.	State Registrar and DIRECTOR
EDNA A. MORTON	Deputy Statistician

BUREAU OF SANITARY ENGINEERING, BERKELEY

CHESTER G. GILLESPIE, C. E.	Chief Engineer and DIRECTOR
FRANK BACHMANN, B. S.	Chemist and Bacteriologist
RALPH HILSCHER, C. E.	Assistant Engineer
JOSEPH DOMAN, C. E.	Assistant Engineer
CLYDE F. SMITH, C. E.	Assistant Engineer
RAY F. GOODEY, C. E.	Assistant Engineer

BUREAU OF FOODS AND DRUGS, BERKELEY

ERWIN J. LEA, M. S.	DIRECTOR
MYER E. JAFFA, M. S.	Consulting Nutrition Expert
AUGUST F. GLAIVE, Ph. C.	Assistant to the Director and Chemist
C. H. McCHARLES	Chemist
L. C. CHANDLER, M. D.	Chemist
FRANK OAKLEY, Los Angeles	Inspector
HENRY R. ROBBINS, San Francisco	Inspector
WM. H. GOURLEY, San Francisco	Inspector
M. P. DUFFY, San Rafael	Inspector
HENRY C. PETERS, Oakland	Inspector
C. B. HEIZER, Oakland	Inspector
R. G. WRAY, Oakland	Inspector

BUREAU OF REGISTRATION OF NURSES, SACRAMENTO

ANNA C. JAMME, R. N.	DIRECTOR
ELIZABETH W. PACK, R. N.	Assistant to the Director

CALIFORNIA STATE BOARD OF HEALTH

MONTHLY BULLETIN

Vol. 13

NOVEMBER, 1917

No. 5

TABLE OF CONTENTS.

	Page.
EDITORIALS—Trying for a Record—Surgeon-General Gorgas on the Health Menace to the Army—A Reflection on Standards—Too Late—Responsibility of the Soldier to Keep Fit—Venereal Disease Suppression First—Venereal Disease in German Army—What Syphilis Costs California—The Price of Milk Begins to Soar—Food Must Be Kept from Spoiling—More Work for the Tuberculosis Associations—Winter Brings Greater Need for School Inspection	194
PROCEEDINGS OF THE NINTH ANNUAL CONFERENCE OF STATE, COUNTY AND MUNICIPAL HEALTH OFFICERS-----	199
THE RELATION BETWEEN THE STATE DISTRICT HEALTH OFFICER AND THE LOCAL HEALTH OFFICER, by Harold Farnsworth Gray, Gr. P. H., Chico, State District Health Officer, Northern District-----	205
SANITATION ABOUT MILITARY CAMPS, by O. G. Wicherksi, M. D., Health Officer, San Diego County, San Diego-----	207
REGULATIONS FOR THE PREVENTION OF SYPHILIS AND GONOCOCCUS INFECTION -----	211
POISONED GRAIN FOR GROUND SQUIRRELS-----	217
VENEREAL DISEASES ARE REPORTED-----	218
SEPTEMBER REPORT OF PLAGUE SUPPRESSIVE MEASURES, by W. C. Billings, Surgeon, U. S. Public Health Service, San Francisco-----	219
OCTOBER MEETING OF THE STATE BOARD OF HEALTH-----	220
VENEREAL DISEASE REPORTS INCREASE, Report of the Bureau of Administration, W. A. Sawyer, M. D., Director-----	221
FEW OUTBREAKS OF DISEASE IN SEPTEMBER, Report of the Bureau of Communicable Diseases, W. H. Kellogg, M. D., Director-----	223
TREATMENT FOR REJECTED TUBERCULOSIS RECRUITS, Report of the Bureau of Tuberculosis, E. L. M. Tate-Thompson, Director-----	225
VENEREAL DISEASE CLINICS TEMPORARILY ACCREDITED, Report of the Bureau of Venereal Disease, H. G. Irvine, M. D., Director-----	227
BIRTHS, DEATHS AND MARRIAGES FOR AUGUST, Report of the Bureau of Vital Statistics, George D. Leslie, Director-----	228
SANITARY ENGINEERING EDUCATIONAL EXHIBITS, Report of the Bureau of Sanitary Engineering, C. G. Gillespie, C. E., Director-----	231
BEWARE OF CANNING COMPOUNDS, Report of the Bureau of Foods and Drugs, E. J. Lea, M. S., Director-----	235
CERTIFICATES GRANTED TO 142 NURSES, Report of the Bureau of Registration of Nurses, Anna C. Jammé, R. N., Director-----	243
LIST OF CITY AND COUNTY HEALTH OFFICERS-----	245

MONTHLY BULLETIN

CALIFORNIA STATE BOARD OF HEALTH

Devoted to the Prevention of Sickness and Death

Entered as second-class matter, August 15, 1905, at the post office at Sacramento, California, under the Act of Congress of July 16, 1894.

Sent free, on request, to any citizen of California.

WILBUR A. SAWYER, M.D., Secretary and Executive Officer . . . Editor
GUY P. JONES, Morbidity Statistician Associate Editor

Trying for a Record. The United States can have the healthiest army in the present war if it can exhibit the efficiency necessary to carry out the program which has been adopted in Washington. Our nation was not rushed into the war as precipitately as France or England. Before the battle of the Marne the French officers did not have time even to make a physical examination of all the recruits rushed into the army to turn back the onrush of the Germans. No wonder that there has been tuberculosis among the French troops! Vaccination has removed any great danger to our army from typhoid fever and smallpox. The best plan ever devised for an army has been evolved to protect our men against venereal disease, not only through direct methods of control, but through education and the furnishing of wholesome recreation. It is encouraging and inspiring to hear Mr. Fosdick and his associates in the National Commission on Training Camp Activities, tell of the plans for sports and amusements of the men. The men will be shown what to do, as well as told what they should not do. The nation is making an attempt to have the cleanest and healthiest army the world has ever seen.

* * * * *

Surgeon-General Gorgas on the Health Menace to the Army.

If a method were offered to the army which would put every wounded man back in the trenches sound and well on the second day and an alternative method were presented which would eliminate venereal disease, the army would choose the elimination of venereal disease. This choice, at the end of a year, would give the army more men in the trenches and a more efficient fighting force. This statement was made by the Surgeon-General of the Army, W. C. Gorgas, of Panama Canal fame, in an address before the war meeting of the American Public Health Association October 19. He stated that the army lost more service on account of venereal disease than from any other one cause. He also asked for better cooperation from civilian health officials in the prevention of venereal disease in soldiers, advocating the use of every practicable means, including the education of the individual.

A Reflection on Civilian Standards.

Colonel F. F. Russell of the United States Army appeared also before the health officials at the meeting in Washington. He again emphasized the losses of the army due to venereal disease, and presented figures showing how much damage was done to the drafted men before they came under army influence or discipline. During the first four weeks of the life of the new National Army the figures presented by Dr. Russell showed that there was nearly twice as much venereal disease in the National Guard as in the Regular Army and about three and one-half times as much in the drafted men just admitted to the National Army as among the regulars. This is a terrible arraignment of the civil population. Such figures would not be possible if public officials, educators, and parents had everywhere done their duty in the instruction of the youths of the country and in the removal of the vicious influences which spread demoralization and disease. If the people in time of peace have had their eyes closed to a great danger to the race, the emergency of the world war should cause an awakening.

* * * * *

Too Late.

The civilian population is struggling with the problem of conserving the health and morals of the soldier in uniform, and the government is showing most commendable activity in improving his environment. These efforts make all the more tragic the discovery that probably the most dangerous period in the life of the recruit has been overlooked. Between the time when the recruit knows that he is to be sent to war and the time that he arrives in camp, there appears to be a period much more filled with temptation to injurious dissipation than the time after he has put on a uniform and has come under discipline. Present experiences are giving support to the opinion that the amount of infection with venereal diseases is greatest during this same period. This means that every town sending recruits has a real war problem. It is not only the towns near the cantonments which are responsible for conditions leading to excesses in our soldiers. Every city in California should join with the cities in the zones around the camps in the campaign against commercial prostitution and its result—venereal diseases.

* * * * *

Responsibility of the Soldier to Keep Fit.

The best protection that government and people can give will not take from the individual soldier the responsibility for not putting his health needlessly in jeopardy. Every failure to prevent a case of venereal disease in a soldier reflects on the adequacy of the steps which the Army and the states are taking to safeguard against such incapacity, but it reflects to a still greater degree on the individual soldier who ran a known and unnecessary risk of destroying his usefulness in the army and of serious future danger to wife and children. The soldier can protect himself completely against venereal disease: the Army and the states can only greatly diminish his temptations and his risks.

Venereal Disease Suppression First.

It has been estimated that the dead and wounded in one hundred and twenty-nine modern battles constituted 79.4 per 1,000 of the total strength of the armies concerned. From these figures it is argued that if an army were to fight a single battle every year, its casualties from dead and wounded would barely be as heavy as from infection with venereal disease. There has never been an army free from these diseases, and it is certain that the efficiency of many an army in many a battle has been so greatly reduced through venereal disease as to make this a deciding factor in military losses. In war time, the suppression of venereal diseases should be the first thought.

* * * * *

Venereal Disease In German Army.

During the past twenty years the frequency of venereal diseases in the German army has shown a steady decline, which continued during the first year of the war. The incidence of syphilis and gonorrhœa in the German army in 1895 was 137 per 1,000, and during the first year of the war it was only 14.4 per 1,000. We have no means of knowing what the venereal disease rate is in the German army at the present time, but it is certain that this reduction has not been maintained since August, 1914. Reports from Germany in the early part of the war indicated that the prevalence was greater in the occupied hostile territory behind the lines than at the front. A celebrated Austrian army surgeon estimated that the incidence of the venereal diseases in the German army during the war is bound to rise to 40 per 1,000 in an army of 7,000,000 men.

* * * * *

What Syphilis Costs California.

Syphilis cost the state of California more than \$631,000 during the two years ending June 30, 1916, and this expense was in state hospitals only. During that period, according to the general superintendent of state hospitals, 14.5 per cent of all persons entering these institutions, 1,010 out of 6,935 admitted, were syphilitic. The total cost of maintaining state hospitals in California during this biennial period was \$4,354,577. No doubt, a large part of the cost of maintaining state prisons is also due to syphilis. How great the cost of syphilis has been to the counties, cities and residents of California, none can say. It is certain, however, that in this respect, syphilis is as destructive as tuberculosis, if not more so.

* * * * *

The Price of Milk Begins to Soar.

Milk, that most essential article of diet for children, is rising in price with the increased cost of fodder and dairy labor. As the cost of production rises, the necessity increases for conserving every pint produced. Uncleanliness in production brings waste through spoilage and often results in disease among consumers. Wherever the local milk inspection department is doing its full duty, the public will find in Grade "A" pasteurized milk a clean and wholesome product for the children. Without a system of supervision and grading, the producer has little inducement to put energy and expense into

safeguarding the health of his customers, and prices are not adjusted according to the quality of the product. It requires eternal vigilance by the inspecting department to see that the milk is clean when delivered to the pasteurizing plant and to make sure that the pasteurization is continuous and efficient. The department which keeps the milk clean and safe is conserving food by preventing spoilage and is conserving life by protecting the health of children.

★ ★ ★ ★ ★

**Food Must Be Kept
From Spoiling.**

Every year large quantities of food in barrels or cans are condemned as unfit for human consumption and are destroyed, fed to animals; or used in manufacturing nonedible articles. Some of this serious waste of food is due to improper conditions during storage, but much of it is caused by uncleanliness and carelessness in handling the raw materials. The most careful cooking and spicing can not hide decaying material from the food and drug analyst. The microscope will reveal even a small admixture of decomposed tomatoes in a ketchup, and it is not economy to try to salvage spoiled goods by mixing them with the better materials and adding spices. The rise in prices and the demand for greater production can not justify the placing of inferior goods on the market under the old labels and at the higher prices. The consumer is paying the bills and the Bureau of Foods and Drugs will see that he gets what he pays for.

★ ★ ★ ★ ★

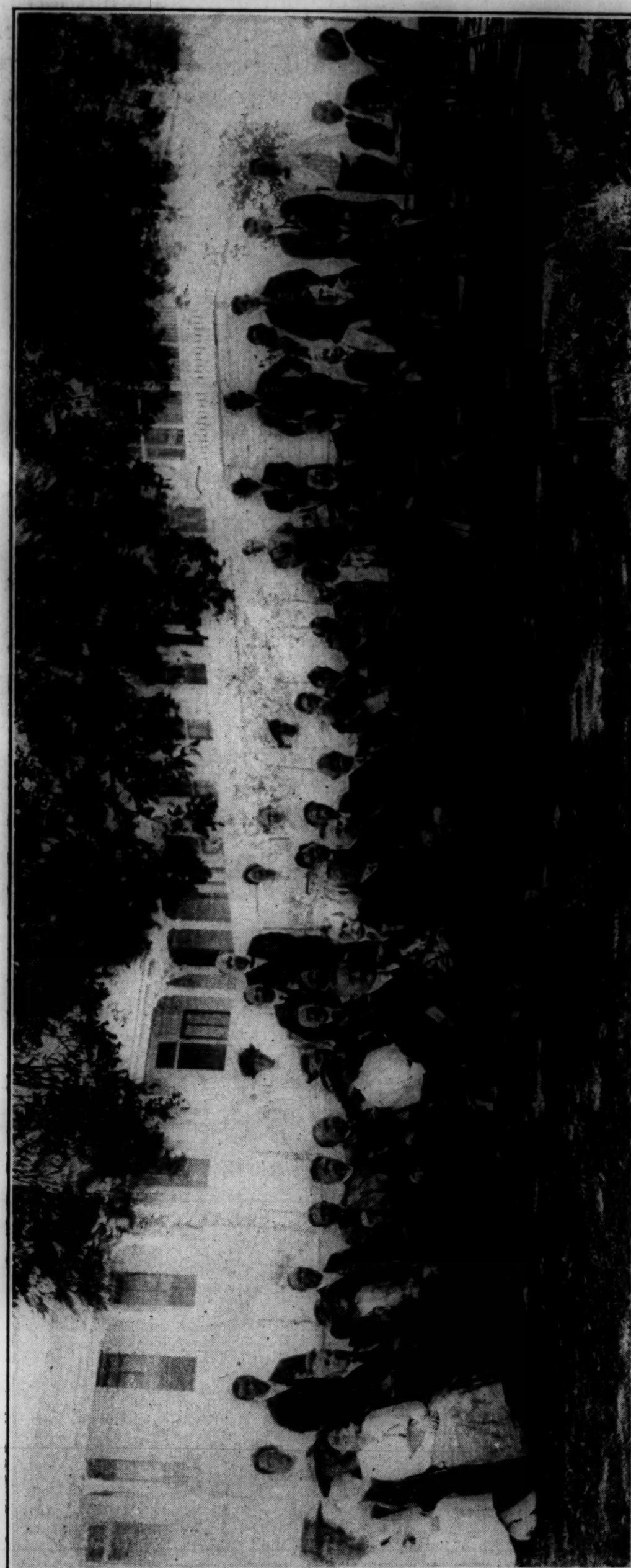
**More Work for the
Tuberculosis Associations.**

If he is merely stunned by the news and does nothing but brood over a gloomy outlook, he will probably in a few years become a burden to his relatives or the public. If he seeks competent advice and supervision at once, his disease will usually be arrested and he will live a long and useful life. County tuberculosis associations and those local health departments which employ public health nurses should do their utmost to help and advise these men to overcome their infection before it is too late.

★ ★ ★ ★ ★

**Winter Brings Greater Need
for School Inspection.**

As winter approaches we pass from the season of greatest prevalence of diseases due to contaminated food or water to the time when the commonest infectious diseases will be those spread by personal contact. Winter usually brings an increase in diphtheria, scarlet fever, pneumonia, and common colds. To diminish these diseases children should be taught to keep their fingers clean, to use their handkerchiefs when sneezing, and also to avoid the common use of cups and of toys that are placed in the mouth. Parents should keep their children at home, away from other children, whenever they show signs of a beginning cold or fever. Schools should improve and strengthen their system of school inspection so that the health of the pupils will not be jeopardized by the carelessness or lack of observation of some parent. The so-called "winter diseases" are nearly all spread in one way, and can be diminished by the same protective measures.



Health officers in attendance at the Ninth Annual Conference of State, County and Municipal Health Officials, held in Santa Rosa, September 25-28, 1917. This picture was taken at a session which was held on the grounds of the Sonoma County Hospital.

PROCEEDINGS OF THE NINTH ANNUAL CONFERENCE OF STATE, COUNTY, AND MUNICIPAL HEALTH OFFICIALS.

The Ninth Annual Conference of State, County and Municipal Health Officials of California, meeting as the Department of Health of the Twentieth Annual Convention of the League of California Municipalities, was called to order at 9.45 a.m., Tuesday, September 25, 1917, at the A Street Pavilion, Santa Rosa, California, President Wilbur A. Sawyer, M.D., Secretary of the California State Board of Health, presiding.

There were present the following delegates:

- Dr. R. B. Duncan, Health Officer of Petaluma.
- Dr. William Simpson, Health Officer of Santa Clara County.
- Dr. O. G. Wicherksi, Health Officer of San Diego County.
- Dr. L. M. Powers, Health Commissioner of Los Angeles (City).
- Dr. Stanley P. Black, Health Officer of Pasadena.
- Dr. Kirby B. Smith, Health Officer of Oakland.
- Dr. A. Hieronymous, Health Officer of Alameda (City).
- Dr. O. P. Paulding, Health Officer of Santa Maria.
- Dr. E. D. Ward, State Health Officer, Southern District, Los Angeles.
- Dr. R. E. Chase, Health Officer, Glendale.
- Mr. Louis Olsen, Health Officer, Palo Alto.
- Mr. R. F. Goudy, Engineering Assistant State Board of Health, Berkeley.
- Mr. E. T. Ross, Sanitary Inspector, State Board of Health, Sacramento.
- Mr. C. G. Gillespie, Director, Bureau of Sanitary Engineering, State Board of Health, Berkeley.
- Mr. Charles Gilman Hyde, Professor Sanitary Engineering, University of California, Berkeley.
- Professor M. E. Jaffa, Consulting Nutrition Expert, State Board of Health, Berkeley.
- Mr. W. H. Gourley, Inspector, Bureau of Foods and Drugs, State Board of Health, Berkeley.
- Mr. C. B. Heizer, Inspector, Bureau of Foods and Drugs, State Board of Health, Berkeley.
- Mr. Guy P. Jones, Morbidity Statistician, State Board of Health, Sacramento.
- Dr. Adelaide Brown, Member, State Board of Health, San Francisco.
- Dr. G. L. Lynch, Health Officer of Amador County, Amador City.
- Dr. John N. Force, Assistant Professor of Epidemiology, University of California, Berkeley.
- Mr. Harold F. Gray, State Health Officer, Northern District, Chico.
- Mr. R. N. Hoyt, State Health Officer, Central Coast District, San Jose.
- Miss Edith Shepherd, Children's Agent, State Board of Control, Sacramento.
- Ruth E. Elmore, Secretary Social Service Commission of Santa Rosa.
- Miss Amy D. Steinhart, Chief Children's Agent, State Board of Control, Sacramento.
- Dr. W. H. Kellogg, Director, Bureau of Communicable Diseases, State Board of Health, Berkeley.
- Dr. Frank L. Kelly, Epidemiologist, State Board of Health, Berkeley.
- Dr. A. N. Loper, Health Officer, Dinuba.
- Dr. Allen F. Gillihan, State Health Officer, North Coast District, Santa Rosa.
- Mr. Alex Hull, Health Officer, Napa City.
- Dr. W. H. Walker, Health Officer, Willows.
- Dr. J. G. Baird, Health Officer, Riverside County, Riverside.
- Dr. C. Mathewson, Health Officer of Fresno (City).
- Dr. A. H. Rankin, Health Officer of Daly City.
- Mr. Edward A. Ingham, State Health Officer, Southern District, Riverside.
- Dr. L. M. Coy, Health Officer of San Bernardino County, San Bernardino.
- Mr. W. H. Marshall, Health Officer of Chico.
- Dr. L. L. Thompson, Health Officer of Butte County, Gridley.
- Dr. A. N. Nittler, Health Officer of Santa Cruz (City).
- Dr. Wm. C. Hassler, Health Officer of San Francisco.
- Dr. L. Michael, Health Officer of San Leandro.
- Dr. W. A. Sawyer, Secretary, State Board of Health, Sacramento.
- Dr. J. H. Shaw, Health Officer of Sonoma County, Santa Rosa.

Mr. E. J. Lea, Director, Bureau of Foods and Drugs, State Board of Health, Berkeley.
Miss Anna C. Jammé, Director, Bureau of Registration of Nurses, State Board of Health, Sacramento.
Dr. Fred W. Browning, Health Officer of Hayward.
Dr. R. W. Nauss, State Health Officer, Central District, Fresno.
Dr. L. K. Van Allen, Health Officer of Ukiah.
Dr. J. W. MacDonald, Health Officer of San Rafael.
Miss Louise McRoberts, Student in Public Health, University of California, Berkeley.
Dr. C. L. Scott, Health Officer of Kings County, Hanford.
Dr. J. L. Ross, Health Officer of Redwood City.
Miss Laura A. Watkins, R.N., Deputy Health Officer of San Jose.
Mrs. Norman Scofield, Health Officer, Sunnyvale.
Dr. S. Iglick, Health Officer of Orland.
Dr. F. H. Smith, Health Officer of San Mateo County, San Bruno.
J. C. McGovern, D.D.S., Health Officer of South San Francisco.
Dr. F. J. Wagner, Health Officer of Santa Monica.
Dr. Jackson Temple, Health Officer of Santa Rosa.
Dr. F. F. Gundrum, Vice President, State Board of Health, Sacramento.

Dr. Joseph H. Shaw, Health Officer of Sonoma County, in a brief speech, welcomed the delegates to Santa Rosa and Sonoma County, and outlined the program and entertainment.

Vice President F. W. Browning now took the chair, and the President, Dr. W. A. Sawyer, gave the annual address of the president, reviewing the work of the State Board of Health in the past year. He called attention to the following: The stamping out of the threatened typhus epidemic; the session of the legislature; the obtaining of the appropriation for the support of six state district health officers; the passage of the local health district bill; the repeal of the law requiring cities to appoint boards of health, thereby making the health officer more directly responsible for his work; the defeat of certain antihealth legislation; the entry of the United States into the world war; the conference of state and national health officials at Washington; the epidemic of cerebro-spinal meningitis among naval recruits at San Diego; cooperation with the army and navy authorities, by sanitary surveys in the vicinity of camps, reciprocal notification of diseases, and follow-up work for communicable diseases and correctible defects in men rejected at the time of the selective draft; and finally in the organization of the Bureau of Venereal Diseases and the work of this bureau and of local health officials against venereal diseases in the civilian population.

The President then assumed the chair, and the report of the Committee on Social Insurance was received from Dr. J. N. Force. The report of the Committee on Legislation was dispensed with. The report of the Secretary-Treasurer, stating that the minutes of the previous conference had been published in the Bulletin of the State Board of Health, and showing that a balance of \$5.35 remained in his hands for expenses of the conferences, was read and accepted. It was moved by Dr. Wicherski, seconded by Dr. Black, that the delegates be assessed the sum of \$1 each to defray the expenses of the conference; passed by unanimous vote.

The annual roll call of delegates then took place, each delegate giving briefly the principal accomplishments and problems in his area of jurisdiction in the past year.

Miss Amy D. Steinhart, Chief Children's Agent, State Board of Control, then read a paper, "The Service Rendered the Public by the Visiting Nurse," which was discussed by Dr. Gillihan and Mr. Gray,

who requested that Miss Steinhart place the data of the State Board of Control in reference to the work they have done towards the establishing of county visiting nurses, in the hands of the state district health officers.

The roll call, which had been interrupted to permit Miss Steinhart to read her paper, was then continued. The conference then adjourned at noon.

The conference reconvened at 2.00 p.m., and the roll call was continued, and at its conclusion the various problems presented by the delegates were discussed by Doctors Sawyer, Hieronymous, Black, Browning and Gillihan.

Miss J. D. MacDonald was scheduled to present a paper on "The Value of Better Babies Contests to the Community," but instead described to the conference her work as Red Cross visiting nurse in Marin County. Her talk was discussed by Doctors Lynch, Ross, Sawyer, Shaw, and Rankin.

In the absence of Mrs. E. L. M. Tate-Thompson, Director of the Bureau of Tuberculosis, State Board of Health, her paper on "What Has Been Accomplished in the Control of Tuberculosis in California During the Past Year" was read by Dr. Gillihan.

The conference adjourned at 4.00 p.m. to the home of Luther Burbank, who, after a brief talk, showed the delegates over his experimental gardens and explained his work.

The conference reconvened at 8.00 p.m., meeting as a joint session with the main body of the league. Mr. B. D. Marx Greene discussed the new state laws providing for the formation of local health districts, and the appointment of the six state district health officers. Mrs. Robert Burdette spoke on the subject of "Conservation." Dr. William C. Hassler, Health Officer of San Francisco, spoke on the work of the San Francisco Health Department, his talk being illustrated by excellent lantern slides. The conference adjourned at 10.00 p.m.

Wednesday, September 26, 1917.

The conference convened at 10.00 a.m., at the Sonoma County Hospital. The sessions were held out of doors under an oak tree on the grounds of the hospital. Mr. R. N. Hoyt, State Health Officer, Central Coast District, read a paper on "The Development of the State District Health Officer Plan." The paper was discussed by Doctors Smith, Scott, Rankin, Simpson, Wickerski, Black, Browning, Gundrum, Ward, and Mr. Ingham.

Mr. Harold F. Gray, State Health Officer for the Northern District, then read a paper on "The Relation Between the State Health Officer and the Local Health Officer." The paper was discussed by Doctors Gillihan, Nauss, McGovern, Kelly, Iglick, Walker, and Gundrum. During the course of the discussion of the two papers, the six state health officers described to the conference the problems encountered in their districts.

Dr. John N. Force, Assistant Professor of Epidemiology in the University of California, after the noon adjournment, read a paper on "How Is Your Municipality Spending Its Dollar for Public Health." The paper was discussed by Doctors Simpson, Kelly, Sawyer, Gillihan, Mr. Hoyt and Mr. Gray.

Dr. Adelaide Brown, Member State Board of Health, read a paper on "Possibilities of the New Milk Laws of the State, and Their Relation to the Child." The paper was discussed by Doctors Kellogg, Black, Powers, Ward, Simpson, Gillihan, and Mr. Gray.

Mr. S. E. Watson, State Dairy Inspector, read a paper on "Cooperation Between the State Dairy Bureau and the Local Health Officer." The paper was discussed by Doctors Walker, Browning and Baird.

On motion, duly seconded, the conference passed unanimously a vote of thanks to the Board of Supervisors of Sonoma County, and to Dr. J. H. Shaw, County Physician and Health Officer of Sonoma County, for the inmates' luncheon and entertainment of the day. The conference then adjourned at 4.00 p.m.

A special evening conference of officers and bureau chiefs of the State Board of Health was held at 8.00 p.m., in the office of Dr. Shaw, at which meeting the relation of the state health officers to the various bureaus of the State Board of Health, and the plans for present and future work of the district health officers, were discussed.

Thursday, September 27, 1917.

The conference convened at 9.30 a.m. under the trees in the grounds of the Odd Fellows' Hall. Dr. O. G. Wicherksi read a paper on "Sanitation About Military Camps," which was discussed by Mr. E. T. Ross, State Sanitary Inspector.

Dr. James G. Cumming, Captain M. R. C., U. S. Army, read a paper on "Prevention of Venereal Diseases in the Army." Dr. L. M. Powers, Health Commissioner of Los Angeles, in opening the discussion, spoke on the work Los Angeles had done, and was going to do, in the suppression of venereal diseases. A very spirited and illuminating discussion of the paper then followed: Dr. Temple spoke on the importance of clandestine prostitution, and the pernicious back-of-the-counter drug store treatments; Dr. Black told of his work in tearing down quack advertising signs; Mr. Gray spoke of available methods in suppressing clandestine prostitution, and of the medical examination of clandestine prostitutes; Dr. Gillihan of the value of reporting sources of infection, and of obtaining the cooperation of boards of supervisors for isolation and treatment of infected persons; Dr. Sawyer of the fact that the sources of infection are usually a comparatively small number of persons, that syphilis is more easily prevented than gonorrhœa, that the State Board of Health proposes to distribute \$10,000 per year of free salvarsan to approved hospitals and clinics, and that, in venereal diseases, the infected persons, particularly the chronic gonorrhœa carriers, can be handled in a manner similar to that in which typhoid carriers are handled; he also spoke of the repressive measures being taken by the Military Welfare Commission, the police, and district attorneys; Dr. Force stated that at the University of California clinic the majority (a large majority) of venereal infections were traced to regular prostitutes; Dr. Sawyer spoke of educational and social service work in connection with the prevention of venereal infections, stating that in the new Bureau of Venereal Diseases there was to be a social service director, that morons were to be placed in a state home now being built, that occupations are being supplied for former prostitutes, and spoke of the fact that many women were intermittent prostitutes,

according to whether the profits of prostitution were large, when there was no repression, or small under repression; Dr. Gillihan stated that in 1915 he had found that a number of large business houses were finding employment for girls who wanted to get out of prostitution; Dr. Walker stated that industry was waking up to its sins, as they used to practically force women employees into prostitution; he stated that Joan of Arc failed when she tried to drive out the camp followers, and that after the war the community will have to face large disease problems; he believed that cases of venereal disease should be treated as sick persons, not as sinners, and that venereal diseases should be handled as we handle other infectious diseases; Dr. Sawyer objected to hospitals and clinics placing a ban against cases of venereal disease, and stated that such would not receive free salvarsan from the state; he also stated that it was foolish to worry much about the quacks until such time as proper clinics, in which cases of venereal disease would be treated as human beings, rather than the scum of the earth, were established; he also called attention to the problem of the male vagrant cases of venereal disease, and stated that the sheriffs and police would in most cases gladly cooperate with the health officer; Mr. Gray suggested the establishment of venereal clinics in connection with county hospitals, and Dr. Coy stated that he maintains a clinic at the San Bernardino County Hospital, where he finds that practically all the Mexicans are infected with syphilis, also much gonorrhœal ophthalmia in the Mexican children, and gonorrhœal vulvovaginitis; he called attention to the great need of parents teaching their children the facts of sex; Dr. Wickerski stated that San Diego intended to take care of its own cases, and would do no "floating."

At the conclusion of the discussion, Dr. Cumming was thanked by vote of the conference for coming to present his excellent paper.

After the noon adjournment, the conference reconvened at 1.45 p.m. Dr. Kellogg, Director of the Bureau of Communicable Diseases of the State Board of Health, read a paper on "The Administrative Control of Diphtheria." The paper was discussed by Doctors Smith, Gillihan, Sawyer, and Messrs. Gray and Olsen. The discussion took up in addition the general subject of detection and isolation in the early stages of communicable diseases, especially in the public schools.

Dr. Frank L. Kelly, Epidemiologist, Bureau of Communicable Diseases, State Board of Health, then read a paper on the "Control of Meningitis," which was discussed by Dr. Smith.

The conference then proceeded to the business meeting. Dr. Simpson moved, duly seconded, that Dr. Temple cast the vote of the conference to reelect the incumbent officers; passed unanimously, and the vote duly cast as follows: President, Dr. Wilbur A. Sawyer; Vice President, Dr. Fred W. Browning; Secretary-Treasurer, Mr. Harold F. Gray.

The foregoing were declared elected. The President then announced the following committee for the ensuing year: Program Committee—Dr. W. H. Kellogg, Chairman; Dr. J. G. Baird, Dr. Kirby Smith, Mr. E. A. Ingham, Dr. C. Mathewson.

On motion, duly seconded, a vote of thanks was given to Dr. Shaw, Dr. Temple, and Dr. Gillihan for their efforts to make the conference a success.

Dr. Browning suggested that the State Board of Health send a letter of thanks to the boards of trustees or of supervisors, as the case might be, for sending their delegates to the conference and defraying their expenses.

On motion, duly seconded, the conference adjourned at 4.00 p.m., to meet in 1918 at Riverside at a date to be set by the officers of the League of California Municipalities.

HAROLD F. GRAY,
Secretary-Treasurer.

"WHEN TWO STRONG MEN STAND FACE TO FACE."

"However great a part material resources and munitions have played and are playing in this war, one fact must not be overlooked, and that is the fighting man. He is just as important and necessary as ever, and the demands that will be made upon his nerves and endurance will be greater than ever before. We need and must have men, millions of them, and they must be trained thoroughly; trained to face the grueling requirements of modern warfare. How can we get them? Only through the American people, who are their own masters."—*Major General Kuhn, U. S. Army.*

THE RELATION BETWEEN THE STATE DISTRICT HEALTH OFFICER AND THE LOCAL HEALTH OFFICER.*

By HAROLD FARNSWORTH GRAY, GR. P. H., State Health Officer, Northern District.

This paper will be brief, as it is the speaker's experience that, at a convention such as this, the most valuable part of the program is the discussion which follows the papers.

The state health officers in the six state health districts are newly appointed to recently-created offices, and it is probable that they all have only rather sketchy outlines of ideas as to what are their duties, and what are their relations to the local health officers. The only possible guide which we have is the experience of state district health officers or sanitary supervisors in a few Eastern states, but very little has been published in regard to the administrative details of their work. We have got to work out our own problem in California according to our needs and conditions, which differ widely from those of the Eastern States. The keynote of this working-out will have to be a mutual cooperation, helpfulness and forbearance on the part of both state and local health officers.

The September Bulletin of the California State Board of Health describes the duties of the state health officers as follows: "The district health officers are available for taking charge of control measures wherever epidemics of communicable disease may appear. They will decide at such times whether the specialized experts from the board's bureaus are needed. It will be their duty to inspect the cities and rural districts for sanitation; to order the correction of insanitary conditions; to aid in bringing about more complete morbidity and birth registration, and to act as local field representatives for the various bureaus of the board. Their services are available at all times to assist the local health officer in making diagnoses and enforcing control measures in outbreaks of communicable disease. They will consult with local authorities relative to the need for the enactment of health ordinances, and will advise concerning the enactment and enforcement of local regulations."

The state health officer acts as the direct personal representative of the State Board of Health, and should be concerned primarily with obtaining administrative efficiency in the various health units of his large district, and with what, for lack of a better term, may be called "sanitary statesmanship." It is impossible for him to give any great amount of personal attention to detailed conditions in any one unit of his district; his success as a state health officer will be measured chiefly by the improvement brought about in the health administration of the various local units, and in the number of major public health problems which he discovers and obtains a solution for.

The state health officer can not give to the local health officer continuous help in the handling of detail or routine procedure; he can, however, bring to the local health officer a varied experience and definite information as to how detail and routine can best be handled. He will,

*Read at the Ninth Annual Conference of State, County and Municipal Health Officials, Santa Rosa, September 25-28, 1917.

in conjunction with the various special bureaus of the State Board of Health, assist the local health officer personally in the solution of large health problems, and the control of epidemics; he will not, however, look at every old privy, or every case of measles. He will not do the local health officer's work for him, but will help him, by advice, information, and demonstration, to do his work better and more effectively. The state health officer will mean to the local health officer, not an official who will pull him out of a hole caused by his own neglect of duty, or a person to whom conveniently to "pass the buck," but an incessant stimulus to more work and better work for the conservation of health.

The principal limitations of the local health officer are: Political interference; lack of public health training and knowledge; part-time service; inadequate compensation, funds and assistance; lack of knowledge of legal powers, authority and limitations. In all of these the state health officer can help the local health officer greatly; he can sweep aside political interference; he can supply technical training and experience; by direct or indirect influence on local governing boards he can bring about eventually, full-time service, adequate compensation, funds and assistance; he can show the local health officer just how far his authority extends, and the proper legal procedure to take.

The state health officer should take the local health officer as he finds him, encourage him and assist him as much as possible, and endeavor to obtain results *through* the local health officer by the exercise of tact, persuasion and helpfulness. He should endeavor to establish or augment the respect of the local community for their local health officer, but in doing so he should have the cordial support of an official worthy of such respect.

Where health conditions in a local unit can not be improved under existing conditions, the state health officer will endeavor to bring about improvement either through a reorganization in the local unit, or by the formation of a new and larger unit by the establishment of a local health district under the new state law (Chapter 571, Statutes of 1917). And, finally, it will be his unpleasant duty to force the resignation or removal from office of the incompetent or neglectful local health officer; we hope that this will seldom occur.

The state health officer faces great opportunities of service, and large responsibilities. The people of California will be best served if state and local health officers cooperate to the fullest extent possible in the improvement of health conditions, and constantly endeavor to find new ways of cooperation and helpfulness for the welfare of the public.

SANITATION ABOUT MILITARY CAMPS.*

By O. G. WICHERSKI, M.D., County Health Officer, San Diego County.

The establishment of military camps in the state of California and at various points throughout the United States came quite suddenly upon us, and meant immediate intensive cooperative work on the part of military, state, county and city health officials. Never before have government officials placed such grave responsibilities on civilians as during the past six months or more, when camps and cantonments were being constructed.

Measures to be enforced depend largely on the following conditions:

- (a) Location of the camp, whether isolated or close to a center of population.
- (b) Stage of the camp, whether under construction or completed.
- (c) The natural and other conditions surrounding the camp.

My paper will deal principally with conditions that existed and problems that arose by virtue of the location of Camp Kearny, about eighteen miles from San Diego. Anticipating that local conditions will vary, I hope that those problems that are of special interest in different localities will be brought out in the general discussion by health officers in whose jurisdictions other camps are located.

Camp Kearny is located in territory under jurisdiction respectively of the health departments of the city of San Diego and of San Diego County. Therefore the two departments had to perform much cooperative and reciprocal work.

Immediately upon the decision that a camp be established in a certain locality, the health officer, in whose jurisdiction such camp and its contiguous territory is located, must make a detailed sanitary survey of the premises surrounding the camp, and correct any insanitary conditions he may find. Camp Kearny is located on a gently rolling mesa surrounded by a small number of ranches and dairies. A sanitary survey was made and the eager response of the ranchers to accept and carry out suggestions and recommendations was most gratifying. It is not necessary to go into details here; the result of such a survey meant a general cleaning up of barnyards, repair of outhouses and making same fly-proof. It was also recommended to spread manure daily and not allow the same to accumulate. The measures were enforced to reduce the breeding of flies. Stagnant pools of water were oiled and wherever possible drained to prevent the breeding of mosquitoes.

Apprehending the fact that soldiers from military camps would stroll into the surrounding territory in groups of two and more and frequently partake of the water from wells and cisterns located on the ranches, a bacteriological examination of the water supplies should be made and all polluted supplies be placarded with the placards issued by our State Board of Health. It was indeed surprising to find how many water supplies are contaminated or polluted. Dairies were particularly instructed to comply with the State Dairy Law, as they

* Read at the Ninth Annual Conference of State, County and Municipal Health Officials, Santa Rosa, September 25-28, 1917.

frequently supply milk to construction camps on or near the cantonment site.

Construction Camps.

When actual military camp construction begins, a small military camp is usually erected in which two or more companies are domiciled. The general plan of such a camp, such as its location, the placing of official headquarters, men's sleeping quarters, kitchens, latrines, corrals, sumps and incinerators, and the sanitary rules and regulations followed in such a camp, will serve as a good standard and working model for civil or private construction camps associated with the erection of the camp. These camps include road camps, railroad construction camps, water, electric light, gas and power construction camps and builders. The life of some of these camps is of short duration; others are fairly permanent, having an existence of several months. The work in some of these camps is performed in concentrated areas, while with others it is spread over fairly long distances, especially in road, railroad and water and gas supply construction.

I have found that the construction camps are the most difficult to handle. This is especially true of the smaller camps, or those that are under the management of an individual who is a novice in this kind of work. It is usually the aim of such an individual to begin his construction work as soon as possible without any consideration of sanitation. He is looking for quick and large financial returns at the smallest possible expense. Both individuals must be handled with firmness and without gloves. Cooperative assistance from military officials and heads of various departments of the State Board of Health, viz, Secretary Dr. Sawyer, Chief Sanitary Inspector Mr. Ross, and District Health Officer Dr. Ward are and were in such instances of great help.

Each camp was required to have an able-bodied man whose entire time was devoted to the cleaning up of the camp and who was held responsible for the sanitary condition of his camp. The camps were, as far as general conditions and the nature of the camp warranted, patterned, as before stated, after the military camp and in compliance with the rules and regulations as given in the "Advisory Pamphlet on Camp Sanitation and Housing, issued by the Commissioner of Immigration and Housing of California." Each camp foreman and camp sanitarian was supplied with such pamphlets and it was interesting and gratifying to see the interest awakened and results obtained after the preliminary skirmish. Men who had had charge of construction camps for many years and believed that camps *could not be kept clean*, especially free from flies, were converted and will never go back to older and slovenly methods.

Garbage is removed daily from these camps, in fly-proof covered containers, to the county farm or neighboring ranches and fed to hogs. Manure from the corrals is also removed daily and immediately spread over the fields of neighboring ranches, and to the city pueblo lands (city farm), and there spread on the fields. No manure is allowed to accumulate in piles, in order to prevent the breeding of flies. After the manure has been removed the soil is covered with crude oil and this covered with straw or dried grass and burned.

Latrines or outhouses are built fly-proof and the feces are covered each day with crude oil, a little straw or other easily inflammable material and then ignited. It is most gratifying to learn how flies can thus be prevented from seeking these places even when not screened. Urinals are painted daily with a thin coat of crude oil. All other waste material is incinerated. When the work is extended over a longer distance, as in road, railroad and water supply construction, "ambulatory latrines or outhouses" have been constructed. They consist of a box about four feet square, painted on the inside with crude oil. The hole has a cover which closes automatically. On the inner front side is a curved piece of zinc or tin to prevent the urine from being spread over the ground surface. Beneath the hole is placed an iron receptacle large enough and deep enough to collect feces. These pans are removed daily and the contents are incinerated on a simple rock incinerator. Men are engaged for this special purpose. These "latrines" are placed at close enough intervals to be of easy access to the men on the line of work and are moved as necessity demands.

With these measures enforced there has practically been no sickness in any of the construction camps.

Much of the food used in these camps and the military camps consists of canned food, and as it is prepared under federal and state laws and regulations, no attention has been paid to it. Fresh foods, such as meat, fish and fruits and milk, are derived only from such establishments as have been investigated by the proper authorities and permission granted upon certification to deliver their products.

Water supplies are constantly watched and only unpolluted water is allowed to be used. Up to the present time we have been able to supply all camps with water from the city water supply of San Diego.

Camp Kearny and also the other military camps in San Diego County (excepting the camps in Balboa Park within the jurisdiction of the city health department) are fairly well isolated, and no concessions of any kind for the erection of lodging houses, hotels, restaurants, ice cream parlors and places of amusement, etc., have been granted. The military authorities have frowned upon such establishments and wherever they have jurisdiction have not granted such privileges. It is the intention of our board of supervisors to enact such legislation, if it becomes necessary, as will make the establishment of such places prohibitive. Should they once become established, they would create a serious and difficult problem to handle.

No regulations have been adopted in California by state or local authorities to control a special sanitary zone around military camps. This has been done in Arkansas, where regulations have been adopted by the State Board of Health. These regulations were printed on page 1254 of the U. S. Public Health Report for August 10, 1917.

I hope that we may be able to control our extra camp or cantonment areas without special legislation or regulations in the future as we have done in the past.

The control of prostitution and the control and prevention of venereal disease in territory surrounding, and in cities near, military camps and cantonments is a grave, serious and difficult problem. As the two papers to follow mine will consider these subjects, I shall not take your time to discuss them in detail, suffice it to say that our district

attorney's office is thoroughly enforcing the Red Light Abatement Law, the police and health departments of San Diego are apprehending prostitutes and when diseased they are being isolated and treated at the county hospital. Other measures will sooner or later be added to those by the State Board of Health, which is working hard to help solve the problems, and by the military authorities.

Contagious Diseases.

By agreement between the State Board of Health and military authorities, a reciprocal system of reporting contagious and infectious diseases has been established between the military camps and the neighboring health authorities. This system of reciprocal notification with other states is used by the California State Board of Health.

Frequent visits to military camps in which the personnel is constantly changing, and to the surrounding or extra zone of these camps, is essential to the welfare of the occupants of the camp and the civil population. It means intensive, continuous cooperative endeavor and work.

SPECIAL BULLETINS PUBLISHED BY THE CALIFORNIA STATE BOARD OF HEALTH.

- No. 1. Concerning Guarantees (out of print).
- No. 2. Poliomyelitis (out of print).
- No. 3. Rabies (Regulations).
- No. 4. Cold Storage (out of print).
- No. 5. Diphtheria (Regulations).
- No. 6. Typhoid Fever (Regulations).
- No. 7. Administrative Machinery (out of print).
- No. 8. Sewage Disposal for Isolated Residences.
- No. 9. Malaria (Regulations).
- No. 10. Sanitation in the Mountains.
- No. 10a. Dietary for Tuberculous Patients (out of print).
- No. 11. Tuberculosis (Regulations).
- No. 12. Hookworm (Regulations).
- No. 13. The Production of Pure Milk.
- No. 14. Rural Sanitation.
- No. 15. Poliomyelitis (Regulations).
- No. 16. Sanitation and Sewage Disposal in Rural School Districts.
- No. 17. Typhus Fever (Regulations).
- No. 18. Sewage Systems and Sewage Disposal Works.
- No. 19. Scarlet Fever (Regulations).
- No. 20. Flies.
- No. 21. Dental Hygiene.
- No. 22. Ventilation Standards for Schools.
- No. 23. Destruction of Ground Squirrels and Rats.
- No. 24. Syphilis and Gonococcus Infections (Regulations).

REGULATIONS OF THE CALIFORNIA STATE BOARD OF HEALTH FOR THE PREVENTION OF SYPHILIS AND GONOCOCCUS INFECTIONS.

(Adopted October 6, 1917.)

Rule 1. Notification.

Any person in attendance on a case of syphilis or gonococcus infection, or a case suspected of being one of syphilis or gonococcus infection, shall report the case immediately, by office number only, to the local health officer, who shall in turn report at least weekly on the prescribed form to the Secretary of the State Board of Health all cases so reported to him.

NOTE 1.—In reporting by office number, an identifying number or initial shall be used which refers definitely to the physician's record of the case.

NOTE 2.—All cases of ophthalmia neonatorum, whether the infecting agent is the gonococcus or not, must be reported to the local health officer within twenty-four hours after the knowledge of the same, as required by chapter 724, Statutes of 1915. Copies of this statute may be obtained by application to the State Board of Health, Sacramento, or the Bureau of Venereal Diseases, 525 Market street, San Francisco. All physicians, midwives and other persons lawfully engaged in the practice of obstetrics may obtain, without cost, the prophylactic for ophthalmia neonatorum (silver nitrate solution in wax ampoules), together with directions for its use, by applying to the Bureau of Communicable Diseases, Berkeley.

NOTE 3.—Any person in attendance on a case of syphilis or gonococcus infection who fails to report the case promptly to the local health officer is guilty of a misdemeanor, punishable by a fine of not less than twenty-five dollars nor more than five hundred dollars, or by imprisonment for a term of not more than ninety days, or by both such fine and imprisonment. (See Public Health Act, sections 13 (Rule 2), 16, and 21.)

NOTE 4.—Physicians attending cases of syphilis and gonococcus infection are expected to furnish to the health officer at the times of reporting the case, any available useful data regarding the sources of infection, in order to assist in the control of these diseases.

Rule 2. Diagnosis.

The local health officer may require the submission of specimens from cases of syphilis or gonococcus infection, or cases suspected of being cases of syphilis or gonococcus infection, for the purpose of examination at a state or municipal laboratory. It shall be the duty of every physician attending a case of syphilis or gonococcus infection, or a case suspected of being one of syphilis or gonococcus infection, to secure specimens for examination when required to do so by the local health officer.

NOTE 1.—Examinations of blood for syphilis by the Wassermann test, and microscopic examinations of smears of pus for gonococci are made without charge by the Bureau of Communicable Diseases at Berkeley if the specimens are properly taken and mailed in the containers furnished by the Bureau of Communicable Diseases. It is expected that the larger cities will provide adequate laboratory facilities. (See directions for sending material to the laboratory.)

Rule 3. Instructions to the Patient.

It shall be the duty of the physician in attendance on a person having syphilis or gonococcus infection, or suspected of having syphilis or gonococcus infection, to instruct him in precautionary measures for preventing the spread of the disease, the seriousness of the disease, and the necessity for prolonged treatment, and the

physician shall, in addition, furnish approved literature on these subjects.

NOTE 1.—Approved literature for distribution to patients may be secured from the Bureau of Venereal Diseases of the State Board of Health, 525 Market street, San Francisco.

NOTE 2.—The following instructions are required as a minimum by Rule 2:

(a) To patients having syphilis:

1. Syphilis or pox is a contagious disease. It can usually be cured, but it requires two or more years of treatment.
2. You must not marry until a reputable physician has pronounced you cured.
3. Avoid all sexual relations.
4. Always sleep alone.
5. Do not kiss anyone.
6. Never permit anyone to use anything which has been in your mouth, such as toothpicks, toothbrushes, pipes, cigars, pencils, spoons, forks, cups, etc., or anything else that you have contaminated.
7. If you have to see a dentist, tell him about your disease before he examines your teeth.
8. Avoid patent medicines, so-called "medical institutes" and advertising "specialists."
9. Consult a reputable physician, or, in case of financial inability, the city or county physician, or a reputable dispensary such as is found in connection with most large public hospitals, and follow directions absolutely.

(b) To patients having gonorrhœa:

1. Gonorrhœa, "clap," or gleet, is a serious contagious disease. If properly treated it can usually be cured.
2. You must not marry until a reputable physician has pronounced you cured.
3. Avoid all sexual relations.
4. Always sleep alone, and be sure that no one uses your toilet articles, particularly your towels and wash cloths.
5. Always wash your hands thoroughly after handling the diseased parts. The discharge, if carried to your eyes, may cause blindness.
6. Avoid patent medicines, so-called "medical institutes" and advertising "specialists."
7. Consult a reputable physician, or, if financially unable to do so, the city or county physician, or a reputable dispensary such as is found in connection with most large public hospitals, and follow directions absolutely.

NOTE 3.—If any person has knowledge that a person infected with syphilis or gonococcus infection is failing to observe adequate precautions to prevent spreading infection, he shall report the facts at once to the local health officer.

Rule 4. Health Officers Designated Inspectors.

All city, county and other local health officers are, for the purpose of the control and suppression of venereal diseases, hereby designated and appointed inspectors, without salary, of the State Board of Health of California, under the provisions of section 2979 of the Political Code.

NOTE 1.—The following paragraph is quoted from section 2979 of the Political Code:

"It (the State Board of Health) shall have general power of inspection, examination, quarantine and disinfection of persons, places and things, within the state, and for the purpose of conducting the same may appoint inspectors, who, under the direction of the board, shall be vested with like powers; provided, that this act shall in nowise conflict with the national quarantine laws."

Rule 5. Investigation and Control of Cases.

All city, county and other local health officers are hereby directed to use every available means to ascertain the existence of, and immediately to investigate, all reported or suspected cases of syphilis in the infectious stages and gonococcus infection within their several territorial jurisdictions, and to ascertain the sources of such infections.

In such investigations said health officers are hereby vested with full powers of inspection, examination, isolation and disinfection of all persons, places and things, and as such inspectors said local health officers are hereby directed:

(a) To make examinations of persons reasonably suspected of having syphilis in the infectious stages or gonococcus infection. (Owing to the prevalence of such diseases among prostitutes, all such persons may be considered within the above class.)

(b) To isolate such persons whenever, in the opinion of said local health officer, the State Board of Health or its secretary, isolation is necessary to protect the public health. In establishing isolation the health officer shall define the limits of the area in which the person reasonably suspected or known to have syphilis or gonococcus infections and his immediate attendant, are to be isolated, and no persons, other than the attending physicians, shall enter or leave the area of isolation without the permission of the health officer.

(c) In making examinations and inspections of women for the purpose of ascertaining the existence of syphilis or gonococcus infection, to appoint women physicians for said purposes where the services of a woman physician are requested or demanded by the person examined.

(d) In cases of quarantine or isolation, not to terminate said quarantine or isolation until the cases have become noninfectious or until permission has been given by the State Board of Health or its secretary.

Cases of gonococcus infection are to be regarded as infectious until at least two successive smears taken not less than 48 hours apart fail to show gonococci.

Cases of syphilis shall be regarded as infectious until all lesions of the skin or mucous membranes are completely healed.

(e) Inasmuch as prostitution is the most prolific source of syphilis and gonococcus infection, all health officers are directed to use every proper means of repressing the same, and not to issue certificates of freedom from venereal diseases, as such certificates may be used for purposes of solicitation.

(f) To keep all records pertaining to said inspections and examinations in files not open to public inspection, and to make every reasonable effort to keep secret the identity of those affected by venereal disease control measures as far as may be consistent with the protection of the public health.

Rule 6. Report of Unusual Prevalence.

When the local health officer, through investigation, becomes aware of unusual prevalence of syphilis or gonococcus infection, or of unusual local conditions favoring the spread of these diseases, he shall report the facts at once to the Bureau of Venereal Diseases, 525 Market street, San Francisco.

APPROVED DISPENSARIES AND HOSPITALS.

In order to bring up the standards of some of the existing dispensaries and hospitals treating venereal diseases, to encourage the formation of additional public dispensaries where needed, and to assist persons needing institutional treatment to ascertain which institutions have adequate staffs and equipment and standards, the State Board of Health is making a list of approved venereal disease clinics and hospitals. As a guide in the formation of the list, standards for approved dispensaries and hospitals, as printed below, have been adopted by the State Board of Health. Dispensaries or hospitals desiring to be admitted to the list should apply on the regular application form obtainable from the Bureau of Venereal Diseases.

**STANDARDS GOVERNING THE APPROVAL OF DISPENSARIES
AND HOSPITALS TREATING VENEREAL DISEASES.**

(Adopted October 6, 1917.)

Dispensaries Treating Syphilis.

- 1. Special Department:** Syphilis shall be treated in a special department or the Department of Dermatology.
- 2. Number of Sessions:** The dispensaries shall be open at least three times a week, day or evening.
- 3. Staff:** The staff shall be adequate in number and training.
- 4. Equipment:** Enough well-arranged rooms, laboratory facilities and equipment, with instruments and apparatus, shall be provided.
- 5. Beds:** Every dispensary shall have at its disposal beds for isolation or treatment.
- 6. Records:** Adequate records of all cases shall be kept.
- 7. Social Service Required:** A social service department shall be maintained and adequate measures adopted to secure a regular attendance of patients.
- 8. Information to Patients:** Clinicians shall devote the amount of time necessary for intelligently informing new patients of the seriousness of their disease, the necessity for prolonged treatment, and the precautions necessary to prevent the spread of infection to others, and the clinics shall, in addition, furnish approved literature on these subjects. (This literature can be secured from the Bureau of Venereal Diseases.)
- 9. Microscopic Examinations:** Microscopic examinations of suspected initial lesions shall be made.
- 10. Wassermann Tests:** Wassermann tests shall be performed in the dispensary laboratory or other approved laboratory.
- 11. Administration of Salvarsan or Equivalents:** Salvarsan or accepted equivalents shall be administered to all cases where there are no contraindications. (Salvarsan or approved substitutes may be obtained without cost from the Bureau of Venereal Diseases, 525 Market street, San Francisco, for the treatment of infectious cases of syphilis in approved dispensaries.)
- 12. Procedure Covering the Discharge of Patients:** Suitable tests and observations shall be made of all patients for a period of not less than two years after the conclusion of adequate treatment. (See pamphlet "Modern Treatment of Syphilis," obtainable from the Bureau of Venereal Diseases.)
- 13. Transfer of Patients:** If it becomes necessary for any reason to discharge a patient still uncured, the patient shall be referred to an approved dispensary or a reputable physician.
- 14. Annual Report:** An annual report of work done in the dispensary shall be made. It is suggested that this include the number of new and old patients and number of visits made, the number of patients continued under observation and treatment from one year

into the next, the number of doses of salvarsan or equivalent administered (with a separate list of free doses), and the number of patients discharged as cured.

Dispensaries Treating Gonorrhœa.

1. **Number of Sessions:** Dispensaries shall be open at least three times a week, day or evening.
2. **Staff:** The staff shall be adequate in number and training.
3. **Equipment:** Enough well-arranged rooms, laboratory facilities and equipment, with instruments and apparatus, shall be provided.
4. **Beds:** Every dispensary shall have at its disposal beds for isolation or treatment.
5. **Records:** Adequate records of all cases shall be kept.
6. **Social Service Required:** A social service department shall be maintained and adequate measures adopted to secure a regular attendance of patients.
7. **Information to Patients:** Clinicians shall devote the amount of time necessary for intelligently informing new patients of the seriousness of their disease, the necessity of treatment until cured, and the precautions necessary to prevent the spread of infection to others, and the clinic shall, in addition, furnish approved literature on these subjects. (This literature can be secured from the Bureau of Venereal Diseases.)
8. **Microscopic Examination:** Systematic microscopic examination of discharges shall be made in departments treating patients affected with gonorrhœa.
9. **Facilities for Asepsis and Antisepsis:** All departments treating patients affected with gonorrhœa shall be equipped with adequate facilities for asepsis and antisepsis.
10. **Urethroscopic and Cystoscopic Examination:** Facilities for urethroscopic and cystoscopic examination shall be provided and regularly employed by the attending clinicians.
11. **Procedure Governing Discharge of Patients:** Patients shall be discharged as cured only after repeated negative clinical and microscopic examinations.
12. **Transfer of Patients:** If it becomes necessary for any reason to discharge a patient still uncured, the patient shall be referred to an approved clinic or reputable physician.
13. **Annual Report:** An annual report of work done in the dispensary shall be made. It is suggested that this include the number of new and old patients, the number of visits made, the number of patients continued under observation and treatment from one year into the next, and the number of patients discharged as cured.

Hospitals Treating Syphilis and Gonorrhœa.

1. **No Discrimination Against Venereal Diseases:** Patients having venereal diseases must be accepted under the same conditions as other patients.

2. General Standard of Hospital: The hospital shall be properly equipped and well conducted.

3. Staff and Equipment: There shall be adequate staff and equipment for the diagnosis, treatment and keeping of records in cases of syphilis or gonococcus infection in general accord with the standards indicated for approved dispensaries.

4. Follow-up: Social service and follow-up work shall be carried on as indicated for approved dispensaries, either by the hospital or by an approved dispensary to which patients are transferred.

DIRECTIONS FOR SENDING MATERIAL TO THE LABORATORY.

Physicians and local health officers may obtain from the Bureau of Communicable Diseases, Berkeley, or any of its depositories, outfits for preparing and mailing specimens for examination for syphilis or gonococcus infections. Printed directions and data cards accompany the outfits.

The examinations at present available at the laboratory are the Wassermann tests for syphilis and microscopic examination of pus from cases of gonococcus infections. Specimens must be mailed only in the regular mailing outfits, and the directions for obtaining the specimens must be followed.

DIRECTIONS FOR OBTAINING SALVARSAN OR SUBSTITUTES, FROM THE BUREAU OF VENEREAL DISEASES.

In order to render infectious cases of syphilis noninfectious in the shortest possible time, the Bureau of Venereal Diseases will issue salvarsan or equivalents, without cost, to approved dispensaries and hospitals for administration to infectious cases, excluding private patients paying physicians' fees. The salvarsan will be issued without cost also to health officers for administration to patients who are under official isolation for syphilis and under treatment at public expense. Applications for salvarsan or substitutes should be made on the appropriate forms, obtainable from the Bureau of Venereal Diseases. There are two different application blanks, one for the use of approved dispensaries or hospitals, and one for health officers. When the material is issued, special forms are sent for use in acknowledging the receipt of the material and for reporting the administration of each dose.

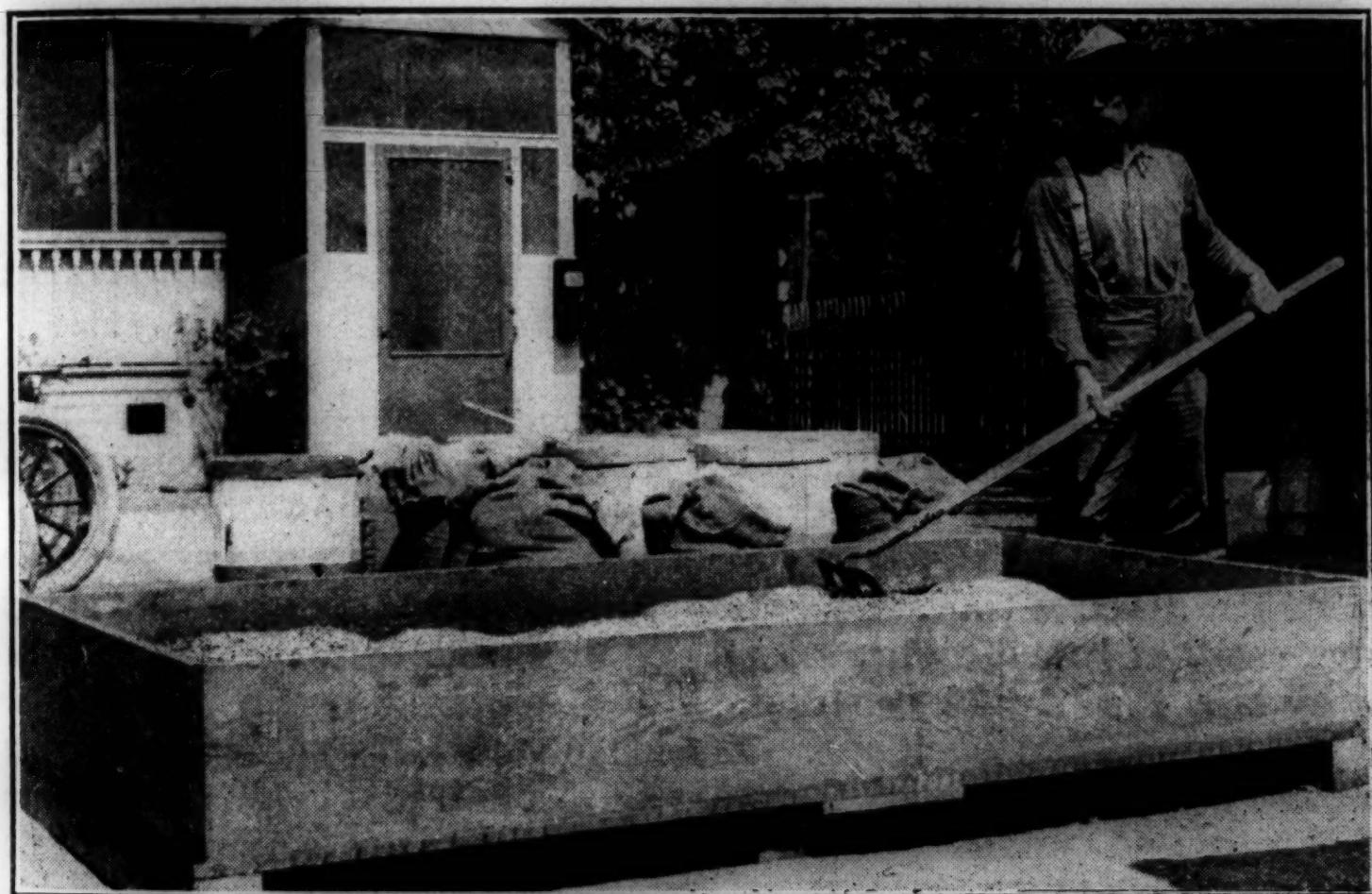
POISONED GRAIN FOR GROUND SQUIRRELS.

The poisoning of ground squirrels is not so effective during the rainy season when there is plenty of green feed. Asphyxiation is the best method of exterminating these rodents during the winter months. There is time now, however, before the heavy rains set in, to accomplish considerable work in killing large numbers of these destructive and disease-bearing rodents. The government formula for poisoned grain to be used in the extermination of ground squirrels is printed here. In using this material, extreme care should be taken in handling the poison and all utensils used in its preparation.

Whole barley (recleaned)	18 pounds
Strychnin sulphate	1 ounce
Soda (bicarbonate)	1 ounce
Saccharine	1 dram
Thin starch paste	1 pint
Corn syrup	2 ounces

Dissolve the strychnin in hot water; thicken with starch to about the consistency of thin soup. Dissolve the soda in one-half pint of hot water and add a little at a time to the poisoned starch until effervescence ceases, then add the syrup and saccharine, mix well and apply to the grain, stirring constantly until the poison is evenly distributed throughout and the grain is thoroughly dry.

Mr. S. E. Piper of the U. S. Department of Agriculture, the inventor of this formula, states that it is particularly advantageous on account of the fact that the



Mixing poisoned grain for the extermination of ground squirrels
at Camp Fremont.

bitter taste of the strychnin is delayed for several minutes and squirrels can pick up and place in their cheek pouches a considerable quantity before any bitter taste is noted; it is then too late for the squirrel to get rid of the poison, as enough of it has been absorbed through the mucous membranes of the cheek pouches to kill the animal.

Extensive experience with this type of poisoned barley has shown an efficiency far ahead of any other type of poisoned grain tested. Young or half-grown squirrels have, in most instances, been practically exterminated and the percentage of adults or full-grown squirrels destroyed is far higher than with other types of poisoned grain used.

Using 12 to 15 pounds of grain instead of 18 pounds, as above, has given better results in many instances.

Caution.

All poison containers and all utensils used in the preparation of poisons should be kept plainly labeled and out of reach of children, irresponsible persons, and live stock.

VENEREAL DISEASES ARE REPORTED.

The reporting of cases of venereal disease in California shows great improvement. Reports of gonococcus infection have more than trebled and reports of syphilis have more than doubled during the first nine months of 1917 as compared with the same period of 1916. In September of 1917 there were about as many cases of gonococcus infection reported as there were of measles or mumps, and there were considerably more cases of this disease than there were of scarlet fever, typhoid or pneumonia. As for syphilis, the number of cases reported during September of this year exceeded the number of cases of diphtheria or whooping cough reported during the same month and was about equal to the number of cases of chickenpox reported.

Number of Cases of Gonococcus Infection Reported.

	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Total
1916 -----	213	37	37	30	44	16	42	57	63	539
1917 -----	207	110	118	161	174	151	200	318	311	1,750

Number of Cases of Syphilis Reported.

1916 -----	144	39	45	45	61	42	56	31	53	516
1917 -----	177	123	113	133	131	78	114	141	142	1,152

This means that the oft-told "conspiracy of silence" regarding the venereal diseases is gradually being disintegrated. An entering wedge of common sense has been driven into prejudice and fear. Clinics, physicians, army surgeons, peace officers and nurses are reporting cases of venereal diseases to local health officers in the same manner that they report cases of tuberculosis, measles or any other disease that is reportable by law, except that venereal disease cases may be reported by office number rather than by name. The seriousness of the venereal disease problem, especially during the war, is recognized by all public health authorities and public opinion is demanding protection from these diseases.

Since the establishment of the Bureau of Venereal Diseases under the California State Board of Health the increase in the number of reported cases of venereal disease is remarkable. A sufficient number of cases is now reported to be of use in the adoption of definite control measures for the protection of the health of soldier, sailor and civilian. This furnishes a working basis for the bureau and marks an advance step in public health administration in California.

SEPTEMBER REPORT OF PLAGUE SUPPRESSIVE MEASURES.

By W. C. BILLINGS, Surgeon, United States Public Health Service, in charge Joint Federal and State Plague Suppressive Measures.

During the month of September, 1917, the work of ground squirrel eradication has been continued in the usual manner in the counties under our supervision, with the exception of San Benito, Monterey and Santa Cruz counties, from which places all field inspectors were withdrawn in order to concentrate in the extra cantonment zone of Camp Fremont. In some of the other counties the number of operators have been diminished for the same purpose, but those mentioned present the only ones in which the force was entirely temporarily withdrawn. The work in San Mateo County, principally in the extra cantonment zone, is progressing satisfactorily and nearing completion for what may be spoken of as the first time over. Unusual effort has been made to make this work intensive in the strictest sense of the word and to attain as high a per cent of efficiency as is possible in going over the ground for the first time. The question as to whether or not we shall again go over this same 25,000 acres as soon as the first application is completed is now under advisement.

Below is appended a tabulated statement of the work during the month:

Number of inspections and reinspections of lands-----	946
Number of acres inspected and reinspected-----	321,755
Number of acres treated with poisoned grain-----	79,850
Number of acres treated with waste ball method-----	1,550
Number of holes treated-----	3,106
Number of acres treated with destructors-----	85

Work of Extra Cantonment Zone.

Number of squirrels found dead -----	496
Number of acres treated with kilmol-----	622
Number of acres treated with poisoned grain-----	11,659
Number of holes treated-----	3,528
Number of pounds of poisoned grain prepared-----	7,026

OCTOBER MEETING OF THE STATE BOARD OF HEALTH.

The State Board of Health met in Sacramento on October 6, 1917. There were present Doctors George E. Ebright, president; Fred F. Gundrum, vice president; Edward F. Glaser, Robert A. Peers, and Wilbur A. Sawyer.

The appointment of Dr. Harry G. Irvine as Director of the Bureau of Venereal Diseases was confirmed. The appointment became effective September 21, 1917.

Amador County was transferred from the Northern State Health District to the Central District, and Trinity County was transferred from the Northern District to the North Coast District.

Mr. Joseph Doman, engineering assistant in the Bureau of Sanitary Engineering, was granted a leave of absence until the expiration of his military service.

Delegates were appointed to represent the board as follows:

Prof. E. J. Lea, Director of the Bureau of Foods and Drugs, at the meeting of State and Federal Food and Drug Inspectors of the Western District at Salt Lake on October 22 to 24.

Mrs. E. L. M. Tate-Thompson, Director of the Bureau of Tuberculosis, at the annual meeting of the southwestern conference of tuberculosis at Grand Canyon on October 22 and 23.

Dr. W. A. Sawyer, secretary of the board, at the annual meeting of the American Public Health Association at Washington, D. C., on October 17 to 20.

Rules were adopted governing access to the records of the State Bureau of Vital Statistics and those in the offices of local registrars. One of the rules provided that any person, to obtain permission to inspect the records of the local registrar, must make written application stating the information he desires to obtain. Local registrars are given the right to refuse the permission to search records if the object is not a proper one.

Permits were granted on the recommendation of the Director of the Bureau of Sanitary Engineering for the operation of 112 swimming pools.

Temporary permit was granted to the city of Vallejo to supply water from impounded reservoirs in the Green and Wild Horse valleys. Temporary sewage disposal permit was granted to the Alameda County Tuberculosis Hospital. A permit was granted to the city of Anaheim to extend its Imhoff tank installation for its sewage treatment.

On the recommendation of the Director of the Bureau of Registration of Nurses the nurses training school in connection with the Vallejo General Hospital, having been inspected and found not to meet the requirements of the board, was not placed on the accredited list of nurses training schools. The nurses training school in connection with the Fairmont Hospital, San Francisco, was placed upon the accredited list for one year.

The board made a ruling relative to graduates of accredited schools in other states where additional study is required after graduation for eligibility for registration as nurses. Included in the ruling was the requirement that where additional study is taken in California it must be pursued as undergraduate work and under the same regulations as pertain to the regular students of the training school.

Certificates as registered nurses were granted to 142 nurses who had passed the examination for registration held on August 22 and 23, 1917. Three nurses were given certificates through reciprocity.

A large number of food and drug cases were taken up and hearings were held. The majority of the cases were referred to the district attorneys for prosecution.

W. A. SAWYER,
Secretary.

REPORT OF THE BUREAU OF ADMINISTRATION FOR SEPTEMBER, 1917.

W. A. SAWYER, M.D., Director.

Activities of State District Health Officers

The reports under this heading in last month's Bulletin covered the activities of all state district health officers from the time that they took office up to the end of the third week of September. During the last week of that month, all of these officers attended the annual Conference of State, County and Municipal Health Officers, held in Santa Rosa, September 25 to 28. The remaining days of the month were spent in routine work in their respective districts. The reports of the activities of the district health officers during the month of October will appear in the December Bulletin.

MORBIDITY REPORTS.

GUY P. JONES, Morbidity Statistician.

Anthrax.

Two human cases of anthrax were reported in San Joaquin County during September. The disease was widely prevalent among animals throughout the state.

Cerebrospinal Meningitis (Epidemic).

There were three cases of this disease reported during September. They occurred as follows: One in San Diego, one in San Francisco and one in San Mateo County.

Smallpox.

There were 26 cases of smallpox reported during the month. Nearly all of these were in Nevada County, where an outbreak occurred in the town of Washington and in the Columbia mine near by. Twenty-two of these 26 smallpox patients had never been vaccinated.

Typhoid Fever.

One hundred and seventy-six cases of typhoid fever occurred during the month, a considerable reduction in the number reported during August, which was 228. The September cases were in 29 counties of the state. Sixty-six out of the 176 cases reported occurred in San Francisco, Los Angeles and Oakland. Minor outbreaks were noted in Calaveras, El Dorado, Los Angeles and Sutter counties.

Poliomyelitis.

Nine cases were reported during September, as against 13 cases reported during September of 1916. These nine cases occurred as follows: Oakland 1, Los Angeles 1, Pomona 1, Potter Valley 1, Colfax 1, San Diego 2, Burlingame 1, and Sonoma County 1.

Malaria.

One hundred and fifty-six cases of malaria were reported. These were distributed throughout the interior valleys of the state.

Typhus Fever.

One case of typhus fever was reported during September, the case being in the person of a Mexican boy at Perris, in Riverside County.

Leprosy.

Two cases of leprosy were noted during the month. One case occurred at El Monte, in Los Angeles County, and one case in Oxnard, Ventura County.

Syphilis and Gonococcus Infection.

These cases are reported more consistently than ever before. Three hundred and eleven cases of gonococcus infection were reported during September, 1917, while but 63 cases of such infection were reported during the corresponding month of 1916. One hundred and forty-two cases of syphilis were reported during September, 1917, while but 43 such cases were reported during the corresponding month of 1916.

Pneumonia.

Pneumonia has been very much more prevalent during 1917 than 1916. There were three times as many cases reported during this month in 1917 as during the same month last year.

Scarlet Fever, Measles and Diphtheria.

Scarlet fever and diphtheria were just as prevalent during September, 1917, as during the same month of 1916, but measles has been considerably more prevalent. In fact, the year 1917 will exceed all previous records in California for the prevalence of measles.

Morbidity for September, 1917, by Weeks.

	Weeks ending—				Total, Sept., 1917	Total, Sept., 1916
	Sept. 8	Sept. 15	Sept. 22	Sept. 29		
Cerebrospinal meningitis -----	1	2	-----	-----	3	-----
Chickenpox -----	27	47	44	25	143	145
Diphtheria -----	23	29	26	34	112	153
Erysipelas -----	3	8	3	5	19	23
Gonorrhea -----	46	105	35	125	311	63
Malaria -----	50	45	25	36	156	123
Measles -----	120	113	48	38	319	156
Mumps -----	44	100	91	106	341	136
Pneumonia -----	34	38	55	57	184	59
Poliomyelitis -----	3	3	-----	3	9	13
Scarlet fever -----	24	45	62	69	200	198
Smallpox -----	2	3	15	6	26	13
Tuberculosis -----	152	152	150	110	564	606
Typhoid -----	49	43	44	40	176	131
Whooping cough -----	29	36	47	26	138	89
Dysentery -----	4	4	3	2	13	-----
Anthrax -----	-----	-----	1	1	2	-----
German measles -----	15	10	30	20	75	7
Tetanus -----	-----	2	2	-----	4	3
Trachoma -----	1	6	1	1	9	9
Typhus -----	1	-----	-----	-----	1	-----
Leprosy -----	1	-----	1	-----	2	2
Pellagra -----	-----	1	-----	-----	1	-----
Ophthalmia neonatorum -----	-----	-----	1	-----	1	3
Syphilis -----	21	55	29	37	142	43
Totals	650	847	713	741	2,951	1,979

SANITARY INSPECTIONS.

EDWARD T. ROSS, Sanitary Inspector.

During September the time of the Sanitary Inspector was taken up largely with exhibits of the State Board of Health. During the first part of the month, an exhibit at the California State Fair in Sacramento was undertaken. Thousands of people attended the fair and looked over the exhibit, which included material from all of the different bureaus of the board.

During the latter part of the month, the same exhibit was moved to Santa Rosa for the meeting of the League of California Municipalities and the annual Conference of State, County and Municipal Health Officers. This exhibit was visited not only by the delegates attending these meetings, but also by the public at Santa Rosa. Many thousands of pieces of literature were distributed at Sacramento and Santa Rosa. Following the Santa Rosa conference, the exhibit was moved to the Land Show at San Francisco.

**REPORT OF THE BUREAU OF COMMUNICABLE DISEASES
FOR SEPTEMBER, 1917.**

W. H. KELLOGG, M.D., Director.

September proved more than usually quiet in the occurrence of communicable disease outbreaks necessitating the assistance of the experts of the bureau. Valuable aid of the newly-appointed district health officers to this phase of the work is well exemplified in the listing in our report for this month of only one epidemiological investigation by members of the staff. A small typhoid outbreak in Hemet and vicinity was handled by Doctor Ward of the South Coast District, and the investigation of the source in Sonoma County of some typhoid occurring in Sutter County was delegated to Doctor Gillihan of the North Coast District.

Several human cases of anthrax having occurred throughout the state, the bureau is commencing an investigation of the prevalence of anthrax in relation to its bearing on human infection.

Division of Biological Examinations.

Summary of Examinations Made in the California State Hygienic Laboratory During the Month of September, 1917.

Condition suspected	Positive	Negative	Inconclusive	Total
Main Laboratory at Berkeley—				
Anthrax -----	19	17	-----	36
Diphtheria (diagnosis) -----	3	17	-----	20
Diphtheria (release) -----	3	5	-----	8
Gonococcus infection -----	11	45	-----	56
Hookworm -----		1	-----	1
Malaria -----		2	-----	2
Rabies -----		3	-----	3
Syphilis (Wassermann test)-----	17	173	12	202
Tuberculosis (sputum examinations)-----	13	33	-----	46
Typhoid (Widal test)-----	8	23	1	32
Typhoid (blood culture)-----		1	-----	1
Typhoid (excreta) -----		9	-----	9
Miscellaneous -----	2	5	-----	7
				423
Northern Branch at Sacramento—				
Diphtheria (diagnosis) -----	1	6	-----	7
Malaria -----		10	1	11
Tuberculosis (sputum examinations)-----	5	8	-----	13
Typhoid (Widal test)-----	7	20	-----	27
				58
Central Branch at Fresno—				
Diphtheria (diagnosis) -----	3	15	-----	18
Gonococcus infection -----	2	-----	-----	2
Malaria -----		6	-----	6
Tuberculosis (sputum examinations)-----	4	6	-----	10
Typhoid (Widal test)-----		15	-----	15
				51
Southern Branch at Los Angeles—				
Anthrax -----	2	-----	-----	2
Diphtheria (diagnosis) -----	12	12	3	27
Diphtheria (release) -----	20	35	2	57
Gonococcus infection -----	1	-----	-----	1
Malaria -----		1	-----	1
Tuberculosis (sputum examinations)-----	11	13	-----	24
Typhoid (Widal test)-----	15	29	2	46
Typhoid (excreta) -----		12	-----	12
Miscellaneous -----		2	2	4
				174
Total number of examinations-----				706

Division of Epidemiological Investigations.

Epidemiological Investigations and Other Special Investigations During September, 1917.

Main Laboratory at Berkeley—

An investigation of typhoid fever at Mokelumne Hill.

Division of Preventive Therapeutics.

Pasteur Treatment for the Prevention of Rabies by the State Hygienic Laboratory During the Month of September, 1917.

	Treatment commenced	Treatment completed
Main Laboratory at Berkeley-----	1	2
Northern Branch at Sacramento-----	0	0
Central Branch at Fresno-----	0	2
Southern Branch at Los Angeles-----	0	0
Laboratory of Sacramento Board of Health, by deputized bacteriologist -----	0	0
Laboratory of San Francisco Board of Health, by deputized bacteriologist -----	0	0
Laboratory of Los Angeles Board of Health, by deputized bacteriologist -----	0	1
Laboratory of San Diego City Board of Health, by deputized bacteriologist -----	0	0
Laboratory of Letterman General Hospital, Presidio, by deputized bacteriologist -----	0	0
Laboratory of United States Naval Hospital, Mare Island, by deputized bacteriologist -----	0	0
Totals -----	1	5

Distribution of Laboratory Products.

Vaccine for the Prevention of Typhoid Fever Issued by the State Hygienic Laboratory During the Month of September, 1917.

Number of physicians to whom vaccine was sent----- 14
Number of complete treatments sent----- 228

Ophthalmia Neonatorum Prophylactic Outfits Distributed During the Month of September, 1917.

Number of outfits, containing two ampoules each, issued----- 332

Public Health Instruction.

Participation in Instruction in Public Health During September, 1917.

Main Laboratory at Berkeley—

Bacteriological instruction outfits sent out-----	1
Bacteriological instruction outfits in use-----	17
Lectures by the Director-----	6
Lectures by the Epidemiologist-----	1

BIOLOGICAL DIVISION.

CHARLES A. KOFOID, Ph.D., Sc. D., Consulting Biologist.

Hookworm Among Miners.

During this month three gold mines in the mother lode in Amador County have been inspected by Professor Kofoid, Doctor Nauss of the Central District Health Office, and Mr. A. M. Bean, Field Agent of the Biological Division, as to sanitary conditions. Fecal samples from 90 miners have been examined thus far with the result that 35 or 38.8 per cent are found to be infected with hookworm, and 7 or 8 per cent with trichiuris. In Mine "A" there was 55 per cent, in Mine "B" 27 per cent, and Mine "C" 25 per cent infection.

Experimental Tests of the Efficiency of Different Methods of Fecal Examination for Hookworm.

With a view to determining the most efficient and at the same time rapid method of detecting hookworm, a series of laboratory experiments have been conducted during the month. Three methods have been employed: 1. The direct smear method with microscopical examination; 2. The concentration of sediment from fecal dilutions by the centrifuge, followed by microscopical examination; 3. Culture of fecal samples in bone black in incubators at 30 degrees C., with microscopical examination of larvæ emerging from cultures. In the 90 fecal samples submitted to all or part of these tests 38.8 per cent of these were found to contain hookworm. The direct smear method resulted in the detection of 22.2 per cent infection, the centrifuge 32 per cent infection, and the culture method 38.8 per cent. The culture method takes somewhat longer to arrive at a determination, since a culture must be kept under observation for several days, but as these figures indicate, it is almost twice as efficient in its detection of what are presumably light infections.

The efficiency is significantly shown by the fact that all positives by the other methods in every case yielded positive results by the culture method.

The tests thus far indicate that the larvæ of trichiurus do not emerge from the eggs within the interval necessary for the detection of the hookworm larvæ. In our tests, the centrifuge method and subsequent examination by microscope were carried out with unusual care and to a degree far beyond that customary in microscopical examination.

Summary of Examinations Made in the Biological Laboratory of the State Board of Health During the Month of September, 1917.

	Positive	Negative	Inconclusive	Total
Intestinal worms—				
Hookworm -----	35	62	0	97
Trichiurus -----	6	91	0	97
Hymenolepis -----	1	96	0	97
Mine earth cultures—				
Hookworm larvæ -----	6	0	3	9
Enterocolitis—				
Giardia -----	0	2	0	2
Entamoeba histolytica -----	0	2	0	2
Trichomonas -----	0	2	0	2

REPORT OF THE BUREAU OF TUBERCULOSIS FOR OCTOBER, 1917.

E. L. M. TATE-THOMPSON, Director.

Every effort will be made by the Bureau of Tuberculosis to place the men rejected in the draft on account of tuberculosis, either in sanatoria, or to provide home treatment for them.

Stand on the side lines in your imagination for a moment and picture what it means to these 1,200 men, many of whom are learning for the first time that they are tuberculous. If only the cure for tuberculosis had been work instead of rest; if only the closed room or workshop were a factor in recovery; if only mental and psychological readjustment, and a change in one's entire mode of living, were not the hardest things to do.

Day in and day out have we stood beside these men, and time after time we have heard them say, "I'd rather face anything than this." And with them all, we have tried to make them see that they have been drafted into a new fight and to tell them where their defense lies. But to talk is easy compared with the problems connected with each individual case. A convalescent camp for these men and the men of the second draft and those excluded from the training camps after three months training, would, in a large measure, solve this. These are not

hospital cases and should not be treated as such. The state need not have the entire burden thrown on its shoulders, for, in many instances, the men could pay a reasonable amount if the state furnished the site, sleeping shacks and equipment. Never has there been such an opportunity to really reach hundreds of people who, given care and treatment, can be cured.

Below is a list of the number of men excluded in the draft on account of tuberculosis to date:

Calaveras County -----	6	Stanislaus County -----	4
Contra Costa County -----	7	Sutter County -----	1
El Dorado County -----	5	Sierra County -----	2
Fresno County -----	107	Plumas County -----	2
Humboldt County -----	2	Lake County -----	2
Imperial County -----	6	Trinity County -----	2
Los Angeles County -----	307	Tulare County -----	56
Madera County -----	2	San Luis Obispo County -----	4
Marin County -----	5	Siskiyou County -----	1
Mariposa County -----	1	Mono County -----	2
Merced County -----	43	Modoc County -----	2
Napa County -----	6	Monterey County -----	1
Nevada County -----	5	Inyo County -----	1
Orange County -----	36	Kings County -----	2
Placer County -----	5	Butte County -----	1
Riverside County -----	27	Del Norte County -----	1
Sacramento County -----	17	Colusa County -----	1
San Benito County -----	6	Kern County -----	9
Santa Barbara County -----	1	Ventura County -----	1
San Bernardino County -----	38	Yuba County -----	7
Santa Cruz County -----	2	Yolo County -----	4
Santa Clara County -----	14		—
San Diego County -----	7		990
San Francisco County -----	61	Miscellaneous -----	38
San Joaquin County -----	121		—
San Mateo County -----	27		1,028
Shasta County -----	6	Unsigned -----	168
Solano County -----	5		—
Sonoma County -----	8		1,196

Large portions of our follow-up work among the drafted men have been assigned to the local tuberculosis societies throughout the state. We hope before the next draft is made to have a record of every man excluded on account of tuberculosis, to know his plans and means for treatment and to assist in every way we can to arrange for his care. The aftermath of war, where tuberculosis is concerned, must make us pause and think.

New Joint Tuberculosis Hospital for Los Angeles, Ventura and Santa Barbara.

A site of 420 acres in the San Fernando Valley has been chosen for the new Tri-county Sanatorium for Los Angeles, Ventura and Santa Barbara. Situated on the main line of the Southern Pacific, it is easily accessible to the patients from the three counties.

The Children's Preventorium at Fresno.

Fresno has decided to enlarge their Children's Preventorium from 20 to 40 beds. Profiting by the experience of their other building that has been overcrowded from the beginning, they hope to make this building large enough to prevent overcrowding at the start.

All the hospitals are suffering because so many physicians have entered the army or navy.

Hospitals Inspected.

Los Angeles -----	9
Livermore -----	1
Fresno -----	2
San Francisco -----	1

REPORT OF THE BUREAU OF VENEREAL DISEASES FOR SEPTEMBER, 1917.

HARRY G. IRVINE, M.D., Director.

Clinics Temporarily Accredited.

Several hospitals and clinics in which venereal diseases are treated have been placed temporarily upon the bureau's list of accredited clinics. This procedure was necessary in order that there might be no delay in getting cases of syphilis treated with free salvarsan for the purpose of making them noninfectious in the shortest possible time. The bureau will issue free salvarsan only to approved public hospitals and clinics, and final or permanent approval will be based entirely upon the standards governing such approval. The following institutions have been placed upon the accredited list to January 1, 1918:

Berkeley.

Berkeley Dispensary.

Los Angeles.

Los Angeles Juvenile Hospital.

San Francisco.

San Francisco Hospital.

San Francisco Polyclinic.

Stanford University Clinic.

University of California Hospital.

In many places throughout the state beds for isolation and treatment have already been secured and plans are on foot for many more, so that eventually all communities will be furnished with this very necessary service. It is hoped that wherever needed, work can be done such as is already being done in San Francisco.

Regulations for Police Court Cases.

Regulations governing the disposal of cases of venereal disease referred to the health department of San Francisco by the police courts have recently been adopted. These regulations provide that all cases showing evidence of infectious lesions either of syphilis, gonorrhea or chancroid, and all cases of gonorrhea which do not show the acute clinical symptoms, but in which the laboratory findings are positive for gonococci, shall be immediately sent to the San Francisco Hospital for official isolation, care and treatment. There can be no deviation from this rule except upon the approval of the health officer. Cases of syphilis showing no infectious lesions, but in which laboratory findings show positive Wassermanns, may receive treatment at the hands of a reputable private physician or clinic approved by the health department, provided that the necessary form of agreement shall be properly signed by both the attending physician or clinic and the patient. All such cases shall be required to report in person to the examining physician of the health department within four days of signing such agreement, bringing a written report from the attending physician stating the treatment administered, and thereafter once each month or oftener if required. Before such patient shall be finally discharged as cured, the final examination and approval of the examining physician of the health department must be secured. It is also required that all blood tests upon which evidence of discharge shall be based, must be made in the laboratory of the department of health. Patients suffering from syphilis who are unable to or who do not secure the services of a private physician or clinic and any patient refusing to conform to these regulations shall be subject to quarantine and treatment at the discretion of the health officer or his official representative.

The work in connection with these court cases has raised the question as to whether this was not a revival of the old so-called "regulation." The bureau realizes that the present system is not perfect and is open to some criticism, but it hopes to see changes made as rapidly as possible in doing away with anything that savors of regulation. The bureau believes that practically all modern police officials and medical authorities on venereal diseases agree that "regulation" has been a failure and for this reason is absolutely opposed to it. In this connection emphasis should be placed on two paragraphs in its published program, under Direct Control No. 6, "To focus on this subject the social forces necessary to give former prostitutes, after they have been put into good physical condition, an opportunity to enter into productive occupations under conditions fair to themselves and the community," and under Education No. 3, "To oppose any local

plan for licensing prostitution or issuing certificates of health to prostitutes by showing that this is in conflict with modern methods of control of venereal diseases, and to substitute the above program which is entirely consistent with the suppression of prostitution." Furthermore, as suggested by the director, the Social Service Department under Miss Lynne has been engaged for several weeks upon an investigation of all agencies, social and otherwise, that might take a part in carrying out this section of the program. The bureau hopes to lend its influence in every way toward seeing that everything possible is done to prevent those women who come under medical control from going back into the business of prostitution.

Educational Work.

The bureau intends to engage actively in the work of education regarding venereal diseases and has already secured a set of slides for use in illustrating lectures. In addition, a complete set of slides has been promised by the American Social Hygiene Association and plans are under way for giving lectures at army posts and camps. The bureau regards this sort of work as of extreme importance and it is the intention to stimulate all interest possible in this part of the adopted program.

REPORT OF THE BUREAU OF VITAL STATISTICS.

GEORGE D. LESLIE, Director.

Births, Deaths and Marriages for August.*

State, Totals and Annual Rate. The following table shows for California as a whole, the birth, death and marriage totals for the current month and the year to date in comparison with corresponding figures for last year, as well as the annual rates per 1,000 population represented by the totals for the current month and the year to date. The rates are based on an estimated midyear population of 3,037,968 for California in 1917, the estimate having been made by the United States Census Bureau method with slight modifications.

Birth, Death and Marriage Totals, with Annual Rate per 1,000 Population, for Current Month and Year to Date, for California: August.

Month or period	Total		Annual rate per 1,000 population, 1917
	1917	1916	
August—			
Births	4,472	4,320	17.3
Deaths	3,047	2,954	11.8
Marriages	3,078	2,536	11.9
January to August—			
Births	33,429	33,100	16.5
Deaths	28,293	26,065	14.0
Marriages	23,302	19,502	11.5

*NOTE.—The present report is for the month preceding but two. This order must be followed, because of the publication of the Bulletin during the early part of the month, before the tabulation of records for the next preceding month is completed.

The three totals for August, 1917, show an increase over August, 1916; the marriage total being especially notable, with a gain of 542.

The birth total for the first eight months of the present year, January to August, inclusive, indicates a gain of 329; the death total for the same period was 1,228 more this year than last, and the marriage total leads with a gain of 3,800.

Length of Residence. The length of residence in California for the 3,047 decedents in August was as follows: Under 1 year, 117, or 3.8 per cent; 1 to 9 years, 546, or 17.9 per cent; 10 years and over, 1,263, or 41.5 per cent; life, 899, or 29.5 per cent; and unknown, 222, or 7.3 per cent.

For residents of the 70 cities of 2,500 population in 1910, there were 103 births and 159 deaths which occurred in registration districts other than the city of residence.

County Marriage Totals. The counties showing the highest marriage totals for the month were as follows: Los Angeles, 711; San Francisco, 562; Alameda, 322; Orange, 134; San Diego, 114; Sacramento, 101; San Joaquin, 91; Fresno, 90; Santa Clara, 88; San Bernardino, 69; Marin, 66; San Mateo, 55; Sonoma, 53; Kern, 47; Riverside, 41; and Monterey, 39.

The aggregate for San Francisco and other bay counties was 1,017 against 845 for Los Angeles and Orange counties together.

County Birth and Death Totals. Exclusive of stillbirths in both cases, the birth and death totals for the month were as follows for the leading counties, arranged in decreasing order of birth registration:

County	Births	Deaths	County	Births	Deaths
Los Angeles -----	1,184	771	San Bernardino -----	103	97
San Francisco -----	721	467	Orange -----	78	66
Alameda -----	441	317	Tulare -----	75	45
Fresno -----	165	91	Kern -----	69	39
Sacramento -----	148	108	Riverside -----	64	46
San Diego -----	138	96	Contra Costa -----	62	28
Santa Clara -----	134	120	Humboldt -----	62	28
San Joaquin -----	107	101	Santa Barbara -----	58	34

City Birth and Death Totals. Birth and death totals, exclusive of stillbirths, are presented similarly for the principal California cities below:

City	Births	Deaths	City	Births	Deaths
Los Angeles -----	744	494	Fresno -----	55	33
San Francisco -----	721	467	Long Beach -----	50	42
Oakland -----	294	186	San Jose -----	43	29
Sacramento -----	115	97	Bakersfield -----	42	26
San Diego -----	107	71	Alameda -----	36	25
Berkeley -----	70	36	Eureka -----	34	11
Stockton -----	62	80	Santa Barbara -----	34	20
Pasadena -----	61	-----	San Bernardino -----	31	33

Causes of Death. The following table shows the classification of deaths in California for the current month, in comparison with the preceding month:

Deaths from Certain Principal Causes, with Proportion per 1,000 Total Deaths for Current and Preceding Month for California: August.

Cause of death	Deaths: August	Proportion per 1,000	
		August	July
All causes -----	3,047	1,000.0	1,000.0
Typhoid fever -----	29	9.5	6.8
Malarial fever -----	8	2.6	1.5
Measles -----	3	1.0	4.3
Scarlet fever -----	2	0.7	1.5
Whooping cough -----	23	7.5	5.8
Diphtheria and croup-----	9	3.0	4.6
Influenza -----			1.2
Other epidemic diseases-----	12	3.9	3.7
Tuberculosis of lungs-----	347	113.9	116.5
Tuberculosis of other organs-----	59	19.4	15.1
Cancer -----	257	84.3	80.8
Other general diseases-----	140	45.9	46.7
Meningitis -----	22	7.2	7.7
Other diseases of nervous system-----	255	83.7	87.3
Diseases of circulatory system-----	544	178.5	147.5
Pneumonia and broncho-pneumonia-----	138	45.3	33.5
Other diseases of respiratory system-----	26	8.5	13.5
Diarrhea and enteritis, under 2 years-----	116	38.1	39.3
Diarrhea and enteritis, 2 years and over-----	46	15.1	21.2
Other diseases of digestive system-----	177	58.1	60.6
Bright's disease and nephritis-----	197	64.7	63.0
Childbirth -----	27	8.9	15.1
Diseases of early infancy-----	113	37.1	39.0
Suicide -----	77	25.3	26.7
Other violence -----	287	94.2	117.4
All other causes-----	133	43.6	39.7

In August there were 544 deaths, or 17.8 per cent of all, from diseases of the circulatory system; 406, or 13.3 per cent from the various forms of tuberculosis; and 364, or 11.9 per cent from violent causes (suicides, homicides, and different kinds of accidents). Deaths from heart disease were again ahead of those from any other cause.

Other notable causes of deaths for the month were as follows: Diseases of the digestive system, 339; diseases of the nervous system, 277; cancer, 257; Bright's disease and nephritis, 197; and epidemic diseases, 86.

The deaths from epidemic diseases were as follows: Typhoid fever, 29; whooping cough, 23; diphtheria and croup, 9; malarial fever, 8; and other epidemic diseases, 17.

The deaths from the three leading epidemic diseases reported for the month were distributed by counties as follows:

Typhoid fever	Whooping cough	Diphtheria and croup
Alameda -----	1 Fresno -----	2 Alameda -----
Butte -----	1 Humboldt -----	2 Fresno -----
Colusa -----	1 Los Angeles -----	5 Los Angeles -----
Contra Costa -----	1 Mariposa -----	1 San Francisco -----
Fresno -----	2 Orange -----	2
Los Angeles -----	6 San Francisco -----	4
Orange -----	2 Santa Clara -----	3
Riverside -----	1 Santa Cruz -----	1
San Bernardino -----	1 Stanislaus -----	1
San Francisco -----	2 Tulare -----	2
San Joaquin -----	3	
Santa Barbara -----	1	23
Santa Clara -----	1	
Stanislaus -----	5	
Yuba -----	1	

Sex, Race and Nativity. The proportion of the sexes among the 3,047 decedents in August was: Male, 1,793, or 58.8 per cent; and female, 1,254, or 41.2 per cent. The race distribution of decedents was: White, 2,859, or 93.8 per cent; Japanese, 73; Chinese, 51; Negro, 49; and Indian, 15.

The 2,859 white decedents were classified by nativity as follows: California, 821, or 28.7 per cent; other states, 1,108, or 38.8 per cent; foreign countries, 841, or 29.4 per cent; and unknown, 89, or 3.1 per cent.

Infant Mortality. There were 333 deaths for children under 1 year, which were distributed by age in months as follows: Under 1 month, 152, or 45.7 per cent; 1 to 2 months, 51, or 15.3 per cent; 3 to 5 months, 64, or 19.2 per cent; and 6 to 11 months, 66, or 19.8 per cent.

In certain cities and counties the deaths under 1 year were as follows: Los Angeles City, 50; rest of Los Angeles County, 27; San Francisco, 35; Oakland, 26; and rest of Alameda County, 15.

The 333 deaths under 1 year, in comparison with the 4,472 live births reported for the month, represent an infant mortality ratio of 74 per 1,000 births.

REPORT OF THE BUREAU OF SANITARY ENGINEERING FOR SEPTEMBER, 1917.

C. G. GILLESPIE, C.E., Director.

During the month the Bureau has maintained an educational exhibit, first at the State Fair in Sacramento, September 8 to 15, and later at the convention of the League of California Municipalities at Santa Rosa, September 24 to 29. The exhibit will next be set up at the Land Show, to be held in San Francisco, October 13 to 28. But two features were exhibited this year, a small model sprinkling filter for sewage treatment set up with water connections and dosing tank, and a portable solution-feed chlorinator. The latter apparatus was set up to feed carbonic acid gas and to exhibit the method of metering the flow of gas. This feature appeared to particularly interest the public.

Some additional consideration has been given this month to the sewerage of Camp Fremont since the camp was ordered reestablished. The particular problem now to be solved is the conversion of existing privies with two rows of seats to a water-flushed latrine type, automatically flushed, for a sum not to exceed \$75 per unit.

In conjunction with the newly-formed Biological Division of the Bureau of Communicable Diseases, the bureau is working on a type of squat privy for mine use as an important step in eradication of hookworm. It is the intention to submit the design to representative mine owners and superintendents and when finally agreed upon as to details, it will likely be installed in a wholesale fashion in the mining regions of the state.

SEWAGE DISPOSAL.

Applications for Permit Filed.

Livermore, Alameda County Tuberculosis Hospital. To construct sewer system, Imhoff tank and sprinkling filter.

Anaheim. To construct additional Imhoff tank facilities at existing site.

National City. To install a sewer system and septic tank with outlet to San Diego Bay.

Permits Granted.

Livermore, Alameda County Tuberculosis Hospital. Temporary permit to operate Imhoff tank and sprinkling filter.

Anaheim. Permit to construct additional Imhoff tank facilities and disposal of sewage on land.

Plans Filed.

Folsom. Revised plans for Imhoff tank.

Livermore, Alameda County Tuberculosis Hospital. Revised plan for Imhoff tank and sprinkling filter.

Anaheim. Revised plans for Imhoff tank.

Santa Barbara. Plans for Imhoff tank.

Linda Vista. Plans for septic tank at army cantonment.

Investigations, Inspections, Reports and Conferences.

Vacaville. September 5. Complaint of poor management of sewer farm investigated. It was found that the attendant had not been down to the farm for several days and the sewage was escaping from the farm on to private property.

Livermore, Alameda County Tubercular Hospital. Investigation made in connection with issuance of permit. The hospital is located on the Arroyo Valle Creek and will accommodate 60 and subsequently 400 patients. All buildings sewer to a high-grade treatment plant to consist of an Imhoff tank, dosing tank, sprinkling filter and sludge bed, located up the canyon so that smells may be blown away from the buildings. Final disposal will be on to a narrow three-acre strip just below the plant, sloping steeply toward the creek. Furrow irrigation at right angles to the direction of slope will be employed to overcome the natural disadvantage of the topography.

Santa Monica. September 13. Reinspection following complaint by property owner near outfall. The electrolytic treatment plant apparently is very little, if any, benefit. Breaking up of the solids by pumps, together with great dilution by sea water, however, serve to reduce nuisance. Conditions were not seriously objectionable at time of inspection.

San Pedro. September 14. Sewers for a small district on Terminal Island and an Imhoff tank to discharge into harbor are proposed. Plan of disposal appears to be satisfactory.

Oceanside. September 24. Marked odors of hydrogen sulphide, that have been attributed to sewer outfall, are in fact due to decaying of vast deposits of vegetation near beach, brought down by river during flood of 1916. The sewage disposal is entirely inoffensive.

Linda Vista. September 25. Sewage from the cantonment will be passed through a septic tank and treated with chlorine, then discharged into a canyon about half a mile from nearest habitation.

National City. September 25. Sewers are proposed for main portion of town. Treatment in a septic tank and disposal into San Diego Bay is planned.

Escondido. September 26. Reinspection of disposal into Escondido Creek. The creek has no natural flow and sewage is treated only in a septic tank, but no nuisance existed. The liquid sinks rapidly into the sandy bed of the creek.

Elsinore. September 26. Reinspection of sewer farm. Crops grown consist of kaffir corn and pumpkins. No objectionable odors noticed.

Riverside. September 27. Untreated sewage is being used for irrigation of about 30 acres of the 300 acres of land owned by the city. Additional water for irrigation is derived from the Santa Ana River. No difficulties in satisfactorily disposing of the sewage are experienced. The inverted siphon to carry the sewage under the river to the farm and the septic tank, which have been planned for over a year, have not yet been built.

Colton. September 27. City has made a new contract granting use of the sewage for 20 years to owners of land about two miles southwest of town, the same land on which a portion of the sewage has been used in the past. An inverted siphon to carry the sewage across the Santa Ana River will be built to replace the wooden flume now used.

Ontario. September 28. Disposal of the sewage on the 175-acre city farm is easily accomplished. A volume of water greater than that of the sewage is regularly pumped from wells to aid in irrigating. The sewage is used for irrigating fruit trees and beans. Fruit canneries in Ontario during the operating season have discharged much lye water into sewers, making it unfit for irrigation, and the sewage is drained on to waste land on the farm at such times.

WATER SUPPLIES.

Applications for Permit Filed.

Vallejo. To continue to supply water to the city of Vallejo and adjacent territory from storage lakes situated in Green and Wild Horse valleys.

Permits Granted.

Vallejo. Temporary permit to continue to supply water to the city of Vallejo and adjacent territory from storage lakes situated in Green and Wild Horse valleys.

Plans Filed—None.

Inspections, Investigations, Reports and Conferences.

Los Angeles. September 1 to 6. Inspection of Owens River and watershed in company with city health commissioner. Opportunities for slight contamination on upper watershed exist. Storage in Haiwee reservoir undoubtedly effects considerable purification. Whether this purification is adequate remains to be determined by a series of analyses.

Linda Vista. September 25. Supplied with San Diego city water. This water is chlorinated at the Otay filter plant, again at the University Heights reservoir, and again on the line leading to the Linda Vista cantonment.

SWIMMING POOLS.

Applications for Permits Filed.

Alameda, A. M. Schmitt, manager, Cottage Baths.

Alameda, Palm Beach Baths.

Alamorio, Huddleston Park Baths.

Anaheim, Young Men's Christian Association.

Auburn, Crystal Springs Baths.

Bakersfield, Beale Park Swimming Pool.

Bakersfield, Union Avenue Plunge.

Berkeley, California School for the Deaf and the Blind.

Berkeley, Young Men's Christian Association.

Big Pine, Inyo Swimming Pool.

Boyes, Boyes Hot Springs.

Brockway, Laurence & Comstock.

Calistoga, Azalia Springs Baths.

Calistoga, Hotel Calistoga.

Calistoga, Iaccheri's Calistoga Baths.

Calistoga, Myrtledale Baths.

Camp Curry, Yosemite, Curry Camping Company.

Cedarville, Leonard's Baths.

Cedarville, Menlo Baths.

Chico, State Normal School.

Chico, Richardson Mineral Springs.

Claremont, Pomona College.

Coalinga, Sulphur Springs Baths.

Cobb, Hoberg's Resort.

Colfax, Shebley's Baths.

Coronado, Coronado Tent City Baths.

Crockett, California and Hawaiian Sugar Refining Company.

Del Monte, Del Monte Roman Baths.

Del Monte, Hotel Del Monte Baths.

El Centro, El Centro Public Plunge.

Fetters Springs, Fetters Hot Springs Baths.

Fresno, Fresno Plunge.

Fresno, Young Men's Christian Association.

Gilroy Hot Springs, Gilroy Hot Springs Baths.

Gilroy, Redwood Retreat.

Glendora, Glendora Foothills School.

Grass Valley, Olympia Park Baths.
Hanford, Hanford Natatorium.
Highlands, Harlem Hot Mineral Springs.
Holtville, Holtville Plunge.
Lakeview, Lakeview Plunge.
Livermore, H. P. Winegar.
Lodi, Municipal Baths.
Long Beach, Long Beach Bath House and Amusement Company.
Los Angeles, Board of Park Commissioners.
Los Angeles, Bimini Baths.
Los Angeles, East Lake Baths.
Los Angeles, Los Angeles Athletic Club.
Los Angeles, Pacific Electric Railway Company.
Los Angeles, Pacific Electric Railway Company (Urbita Springs).
Los Angeles, Sultan Turkish Baths.
Maricopa, Kerto Employee's Club.
Middletown, Harbin Hot Springs.
Midlake, Blue Lakes Baths.
Modesto, Hotel Hughson.
Modesto, Modesto Christian Association.
Murrietta, Guenther's Murrietta Hot Springs.
Napa, California Medical Missionary & Benevolent Association.
Napa, Solid Comfort Resort.
Needles, Santa Fe Reading Room Baths.
Oakland, Idora Park Company.
Oakland, Young Men's Christian Association.
Oceanside, San Diego Consolidated Gas and Electric Company.
Oilfields, Shell Company of California.
Pasadena, Board of Education (Elementary School Plunge).
Pasadena, Board of Education (High School Plunge).
Palo Alto, Palo Alto Municipal Baths.
Paso Robles, Municipal Baths.
Paso Robles, Paso Robles Springs Hotel.
Porterville, Congregational Church.
Redlands, Young Men's Christian Association.
Riverbank, Riverbank Swimming Pool Association.
Riverside, Fairmount Park Swimming Pool.
Riverside, Young Men's Christian Association.
Sacramento, Joyland Swimming Baths, Incorporated.
Sacramento, Sacramento Riverside Bath and Park Company.
Sacramento, Young Men's Christian Association.
Sacramento, Del Paso Country Club.
Saint Vincents, St. Vincent's Orphan Asylum.
San Diego, Grant-Holmes Operating Company.
San Diego, Kyles Bath House.
San Diego, Los Banos Baths.
San Fernando, Thomas Knox.
Santa Paula, Sulphur Mountain Springs.
San Jacinto, Gilman's Relief Hot Springs.
Sierra Madre, Sierra Madre Canyon Park Baths.
St. Helena, Woodworth's Baths.
San Francisco, Golden Gate Park Commission.
San Francisco, Playground Commission.
San Francisco, The Concordia Club.
San Francisco, Women's Athletic Club.
San Francisco, Young Men's Institute Hall Association.
San Jose, Board of Education.
San Jose, Young Men's Christian Association.
San Jose, Young Women's Christian Association.
San Mateo, Knights of Columbus.
San Mateo, Leslie Swimming Club.
Santa Cruz, Mountain View Ranch Baths.
Skaggs, Skaggs Hot Springs.
Stanford University, Board of Athletic Control, Stanford University.
Stanford University, Board of Trustees, Stanford University.

Stockton, Olympia Baths.
 Stockton, Stockton High School.
 Stockton, Stockton Mineral Baths.
 Stockton, Young Men's Christian Association.
 Tassajara Hot Springs, Tassajara Mineral Baths.
 Turlock, Turlock Public Baths.
 Venice, Venice Bath House.
 Watsonville, Young Men's Christian Association.
 Wawona, Wawona Hotel Company.
 Wrights, Redwood Lodge Baths.
 Wrights, Wrights Baths.
 Yuba City, Marysville Boat and Bath House.

Temporary Permits Granted.

Pending investigation, temporary permits have been granted to operate the above-named pools.

Plans Filed.

Los Angeles. Plans for bathhouse and swimming pools in Exposition Park.
Bakersfield. Plans of Beale Park Swimming Pool.
Claremont, Pomona College. Plans of the college swimming pool.

LABORATORY WORK.

Bacteriological examinations of water—208, of which 118, or 57 per cent, showed contamination.

Bacteriological examinations of ice—2.
 Bacteriological examinations of sewage—2.
 Chemical examinations of water—255 (partial).
 Sanitary chemical examinations of water—4.
 Mineral examination of water—1.
 Chemical examinations of trade wastes—2.

REPORT OF THE BUREAU OF FOODS AND DRUGS FOR SEPTEMBER, 1917.

E. J. LEA, M.S., Director.

During the month of September 121 samples of foods, drugs and miscellaneous materials were received at the laboratory. The samples were classified as follows:

Official Samples.

Foods.

Beans	
Beverages	
Cider	2
Orangeade	1
Punch, fruit	1
Bread	
Butter	
Cocktail, oyster	
Coffee	
Condiments	
Catsup	4
Chutney	1
Cream	
Gelatine	
Ice cream	
Kream Krisp	

Drugs.

Acid acetyl-salicylic tablets	
Camphorated oil	
Hair tonic	

2	Liquors	10
4	Amer Picon	1
	Brandy	1
	Champagne	1
1	Gin	1
1	Swiss liquor	1
1	Whiskey	2
2	Milk, fresh	2
1	Molasses	4
5	Salad oil	1
	Sausage	3
	Spices	1
1	Syrup, orange	1
4	Vanilla extract	1
2	Vinegar	2
1		

1	Rheumatic Specific	1
3	Tincture of iodine	1
1		

Unofficial Samples.

Foods.

Beer, nonintoxicating	3	Liquors	2
Bran	1	Amer Picon	1
Catsup	1	Whiskey	1
Cider	2	Milk, condensed	1
Coffetone	1	Molasses	1
Gelatine	4	Walnut meats	1
		Water	2

Drugs, Etc.

Canning compound	1
Hair tonic	2
Headache powders	1
Water	1

State Institution Samples.

Foods.

Baking soda	1	Cinnamon	1
Butter	1	Coffee	2
Cereals	8	Crackers	3
Bran, table	1	Flour	8
Corn flakes	1	Fruit	2
Corn meal	1	Apricots	1
Farina	1	Pears	1
Oat flakes	1	Lemon extract	1
Oat meal	1	Oil cake meal	1
Pearl barley	1	Peas, split	1
Wheat, rolled	1	Pickles	1
Cheese	1	Syrup	2

Miscellaneous.

Ammonia	1	Soap	3
Cream of tartar substitute	1	Chip	1
Hair dye	1	Hand	1
Lye	2	Laundry	1

Beans. Numerous dealers in groceries and provisions have been selling beans containing an unusually large percentage of immature, moldy beans. In some of these lots of beans the percentage of bad material was large enough to indicate that the stock was not the normal run of beans from the fields, but represented cull material. Such beans should be sorted before putting on the market. This bureau has taken action in several cases of this kind and will continue to do so in all cases where inferior and damaged beans are offered for sale.

Oyster Cocktail. Two samples of oyster cocktails were examined and found unsuitable for human consumption, owing to the poor quality of catsup used.

Condiments. Tomato paste and conserva is being manufactured on a large scale this year. Several lots which have been examined have been found in good condition, but, on the other hand, a great deal of this material has been found to contain excessive bacteria, mold and decomposed tomato refuse. Some of these lots contained a large number of flies finely ground.

Gelatine. Eight samples of gelatine were examined this month. The majority of these samples contained excessive glue and either excessive arsenic or zinc. This gelatine was received from the East and was covered by interstate guaranty, therefore the cases will be turned over to the Federal District Attorney for prosecution. The gelatine has been seized and will be denatured before being released.

Kream Krisp. A great many dealers in this state have on hand stocks of a vegetable shortening known as "Kream Krisp," manufactured by the Berlin Mills Company, Portland, Maine, which is rancid and unfit for human consumption. Much of this material has been seized by this bureau and it will be denatured before being released.

Liquors. Ten samples of miscellaneous liquors were examined, with the result that practically all of them were found adulterated. Owing to the high price of liquors, there seems to be a great incentive for adulteration.

Sausage. Three samples of sausage were examined and found to contain a cereal which absorbs a large amount of water. Sausage containing cereal should be labeled to indicate this fact. Two per cent of cereal is permitted in sausage, provided it is plainly declared.

Spices. Chicken cayenne—One sample of "chicken cayenne" was examined and found to consist largely of cereal with a small amount of exhausted cayenne, and sufficient red oxide of iron to give the mixture the appearance of cayenne.

Beer. Numerous samples of so-called "nonintoxicating beer" have been submitted to this bureau for analysis in order to determine whether or not they comply with the requirements of a dry territory and the United States Army. All of the samples examined contained less than five-tenths per cent alcohol and, therefore, could legally be sold as "nonintoxicating beer."

Canning Compound.

Information has reached this office indicating that a material known as "Mrs. Price's Canning Compound" is being sold to housewives in the northern part of the state.

A sample of this material analyzed in this laboratory was found to consist of boric acid, a preservative which is prohibited in food by both state and federal laws.

The effect of boric acid and its compounds in foods has been thoroughly investigated and found to be injurious to the human system.

The price of a package of this material is exorbitant. The housewives, therefore, are not only induced to use an injurious material, but are also defrauded.

Tomatoes.

The tomato season in California opened during the latter part of September with a normal crop of very good tomatoes.

This bureau is cooperating with the canners in the same manner as it did last year—by preparing notices concerning the delivery of tomatoes to growers and the proper preparation of the tomatoes by the canners. About two thousand notices were sent out to the canners, who in turn distributed them to their growers.

Reports from our inspectors in many districts show that the deliveries to canners are thoroughly satisfactory. However, in a few instances moldy or sour tomatoes have been delivered to many of these establishments. These tomatoes were quarantined pending sorting, after which they were delivered to the canner. A few canners have endeavored to contract for inferior tomatoes for the purpose of making tomato paste or conserva, which commands a fancy price this season.

The inspectors of this bureau will be active among the tomato growers and canners during the entire season and if inferior tomatoes are used action will be taken.

Butter Merger.

A device called a "butter merger" has been sold quite extensively in California, and is still being demonstrated and sold.

The demonstrators claim that this device will make two pounds of butter from one pound of butter and one pound of milk. Their literature reads:

"With this little machine one can make two pounds of butter where there was only one before—make two pounds of butter out of one pound of creamery butter and a pint of pure, sweet milk."

These statements are false and fraudulent. What actually occurs is this: Butter, according to the legal standard, contains not less than 80 per cent of butterfat. Milk, according to legal standard, contains not less than 3 per cent of fat and $8\frac{1}{2}$ per cent of solids, not fat. The remainder of the milk, or about $88\frac{1}{2}$ per cent of the milk, is water. Therefore, about $88\frac{1}{2}$ per cent of water, 3 per cent of fat and $8\frac{1}{2}$ per cent of solids are added to a pound of butter, which has the effect of highly diluting the butter with water, and makes only a very slight increase in the food value, owing to the small amount of fats and solids added. This mixture of butter and milk can not be legally sold as butter, because it is only about one-half the required standard and it contains but little more than one-half the food value of butter.

The demonstrators of this device are very persistent in trying to make the public believe that they can actually make two pounds of butter from a pound of butter and a pint of fresh milk. Many people have been deceived and this warning is issued so that people who have been deceived will not attempt to sell for butter the mixture made by this so-called "butter merger." Furthermore, the parties who demonstrate this device in the manner above mentioned are violating the provisions of section 654a of the Penal Code of California, which prohibits false advertising.

Eggnit.

A package of material sold as a substitute for eggs has been collected by one of our inspectors. This package is labeled:

EGGNIT
A Pure Food Product for
BAKING AND COOKING
Use as 12 Eggs
Artificially Colored
With Pure Certified Color
Price 10 cents.

This material consists very largely of corn starch sold at the rate of one and a half ounces for 10 cents. The label indicates that these one and a half ounces are equivalent to twelve eggs, whereas the material does not possess any of the qualities of eggs.

The sale of this material as represented and labeled is both false and fraudulent. Corn starch at the rate of about one dollar per pound is certainly excellent business for the manufacturers of this material, but we hope the California housewives will not waste their money on such fraudulent schemes.

ARTICLES OF FOOD CONDEMNED.

The following articles of food, condemned upon physical and chemical examination as unfit for food, were either destroyed or denatured during the month of September, 1917: Mixed candy, 75 pounds, decomposed, Oakland; corn, 1 can, swelled, Morgan Hill; crab meat, 2 cans, swelled, Morgan Hill; eggs, 3 dozen, decomposed, Oakland; ham, 10 pounds, decomposed, Oakland; hominy, 2 pounds, swelled, Morgan Hill; Kream Krisp, 2 pounds, rancid, Morgan Hill; olive oil, $\frac{1}{2}$ gallon, rancid, Morgan Hill; onions, 40 pounds, decomposed, Oakland; peaches, 109,802 pounds, moldy, decomposed, Elmhurst; peas, 1 can, swelled, Morgan Hill; salmon, 1 can, spoiled, Morgan Hill; tomatoes, 25 boxes, rotten, San Francisco.

CASES REFERRED.

The following cases were referred to district attorneys at the meeting of the board held September 4, 1917: Amer Picon, adulterated and mislabeled, substitution of other materials, Tognoli & Garofoli, North Shore Hotel Bar, San Rafael; Amer Picon, adulterated and mislabeled, substitution of other materials, John Buletti, Brooklyn Hotel Bar, Petaluma; Ferro-China Bisleri bitters, adulterated and mislabeled, substitution of other materials, Tognoli & Garofoli, North Shore Hotel Bar, San Rafael; butter, adulterated and mislabeled, rancid and decomposed, Makins Produce Co., San Francisco; chili sauce, adulterated and mislabeled, filthy and decomposed, Sassarni Grocery Co., Inc., Truckee; Fernet-Branca, adulterated and mislabeled, substitution of other materials, A. Belluomini, Colfax; Fernet-Branca, adulterated and mislabeled, substitution of other materials, A. Stoutenberg & G. E. Johnston, Grass Valley; Fernet-Branca, adulterated and mislabeled, substitution of other materials, M. Miller, Pinole; fig paste, adulterated and mislabeled, filthy and decomposed, Collins-McCarthy Co., Inc., San Francisco; *Tunny fish in pure olive oil, adulterated and mislabeled, cottonseed oil substituted for olive oil, Van Camp Sea Food Co., San Pedro; frankfurters, adulterated and mislabeled, contained cereal, George Brauer's Delicatessen, San Francisco; frankfurters, adulterated and mislabeled, contained cereal, L. Garfinkle, San Francisco; frankfurters, adulterated and mislabeled, contained cereal, Leveroni & Maffei, Broadway Meat Market, Sonoma; frankfurters, adulterated and mislabeled, contained cereal, E. Rhein, proprietor, New Junction Market, Chico; frankfurters, adulterated and mislabeled, contained cereal,

*Referred on two counts.

W. R. Harper, proprietor, Rockridge Market, Oakland; gin, adulterated and mislabeled, substitution of other materials, Joe & A. E. Rose, San Pablo; gin, adulterated and mislabeled, substitution of other materials, P. Franzine, Truckee; gin, adulterated and mislabeled, substitution of other materials, Frank Ferrari, proprietor, Eagle Saloon, Truckee; gin, adulterated and mislabeled, inferior materials substituted, J. & F. Mitchell, Wisconsin Hotel, Grass Valley; gin, adulterated and mislabeled, inferior materials substituted, W. F. Horan, Grass Valley; tincture iodine, adulterated and mislabeled, below U. S. P. Standard, Y. Littroff-La Stella, Prescription Pharmacy, San Francisco; German Kummel, adulterated and mislabeled, substitution of other materials, Nick Miloglav, Nick's Cafe, San Francisco; chopped meat, adulterated, contained sulfur dioxide, C. G. Swanson, Healdsburg Market, Healdsburg; fresh milk, adulterated and mislabeled, contained dirt, etc., partially skimmed, Gus Nickels, proprietor, Bon Ton Restaurant, Grass Valley; fresh milk, adulterated and mislabeled, contained dirt, etc., L. Passadore & Co., Santa Cruz; essence of peppermint, adulterated and mislabeled, deficient in peppermint oils, J. E. Beck, M.D., Carmel; Norwegian sardines, adulterated and mislabeled, filthy and decomposed, Mrs. Wm. F. Belding, San Pablo; orange syrup, adulterated and mislabeled, contained coal tar color, artificial flavor, J. D. Tupper, Grass Valley; Tagliarini, with eggs, adulterated and mislabeled, other materials substituted for eggs, Tivoli Paste Co., San Francisco; vermouth, adulterated and mislabeled, substitution of other materials, L. Cortopassi & Son and Bertolucci, Colfax; vermouth, adulterated and mislabeled, substitution of other materials, Johnson & Carr, Monte Rio; *walnut meats, adulterated and mislabeled, rancid and decomposed, M. A. Katz & Co., San Francisco; whisky, adulterated and mislabeled, substitution of other materials, Johnson & Carr, Monte Rio; whisky, adulterated and mislabeled, substitution of other materials, S. Gianella, proprietor, South City Hotel Bar, South San Francisco; whisky, adulterated and mislabeled, substitution of other materials, W. F. Horan, Grass Valley; whisky, adulterated and mislabeled, inferior materials substituted, Capt. E. Weit, Farallone Hotel, Farallone.

CONVICTIONS UNDER FOODS AND DRUGS ACTS, REPORTED DURING SEPTEMBER, 1917.

Amer Picon, adulterated and mislabeled, Mora & Macrena, Santa Rosa, fined \$5; Amer Picon, adulterated and mislabeled, Picchi & Gamba, Half Moon Bay, fined \$25; blackberry brandy, adulterated and mislabeled, Theo. Gier Co., Oakland, fined \$5; tomato catsup, adulterated and mislabeled, Lewis Packing Co., San Francisco, fined \$10; eggs, adulterated and mislabeled, Wm. H. Rosenblatt, San Francisco, O. R. 6 months; Fernet-Branca, adulterated and mislabeled, Stoutenberg & Johnston, Grass Valley, fined \$5; gin, adulterated and mislabeled, Karl Schmid, Santa Rosa, fined \$5; gin, adulterated and mislabeled, A. H. Parnell, Monterey, fined \$25; gin, adulterated and mislabeled, S. P. Naselli, Monterey, fined \$25; gin, adulterated and mislabeled, Agua Caliente Springs, Caliente, fined \$5; gin, adulterated and mislabeled, Agua Caliente Springs, Caliente, fined \$5; gin, adulterated and mislabeled, G. Patroni, Princeton, fined \$25; gin, adulterated and mislabeled, G. Tomei, Princeton, fined \$25; gin, adulterated and mislabeled, J. & F. Mitchell, Grass Valley, fined \$5; gin, adulterated and mislabeled, W. F. Horan, Grass Valley, fined \$5; kippered herring, adulterated and mislabeled, Cnopius Mercantile Co., Santa Rosa, fined \$20; Kummel, adulterated and mislabeled, John Brendel, Santa Rosa, fined \$5; fresh milk, adulterated and mislabeled, Wm. Crocker, Santa Rosa, guilty, sentence suspended; milk, adulterated and mislabeled, Gus Nickos, Grass Valley, fined \$5; orange syrup, adulterated and mislabeled, J. D. Tupper, Grass Valley, fined \$5; Eastern oysters, adulterated and mislabeled, Western California Fish Co., Oakland, fined \$10; *pork sausage, adulterated and mislabeled, H. M. Aggens, Petaluma, fined \$10; raspberry syrup, adulterated and mislabeled, Karl Schmid, Santa Rosa, fined \$5; vermouth, adulterated and mislabeled, Feroni & Arright, Santa Rosa, fined \$5; vermouth, adulterated and mislabeled, Dan Bortoli, Half Moon Bay, fined \$25; whisky, adulterated and mislabeled, Western Liquor Co., San Francisco, O. R. 6 months; whisky, adulterated and mislabeled, W. H. Grosskurth, Marine View, fined \$25; whisky, adulterated and mislabeled, Fetters Springs Co., Fetters Springs, fined \$5; whisky, adulterated and mislabeled, W. F. Horan, Grass Valley, fined \$5.

*Referred on two counts.

The following Notices of Judgment have been received from the Secretary of the United States Department of Agriculture, Washington, D. C. Copies may be had by addressing the Superintendent of Documents, Government Printing Office, Washington, D. C., at 10 cents per copy.

Item	N. J. No.	Item	N. J. No.
Acid, acetylsalicylic:		Nuts,	
Webster, Wm. A., Co.	4746	Bernheimer Bros.	4707
Zar, Bernard	4746	walnuts:	
Apple butter:		Zucca & Co.	4730
Smucker, J. M.	4721	Oil, wintergreen leaf:	
Aspirin. <i>See</i> Acetylsalicylic acid.		Dowe, F. P.	4704
Balsam, throat and lung:		Ointment, universal:	
King Medicine Co.	4713, 4719	Kane & Behrens	4709
Ritchey Portrait Co.	4713, 4719	Onion salad. <i>See</i> Salad.	
Beans.		Oysters:	
Brown, A. J., Seed Co.	4739	Goodwin, J. E.	4720
Brown, L. M.	4739	Peaches, dried:	
Twitchell-Champlin Co.	4734	California Dried Fruit Co.	4747
fava:		Peas, canned:	
Koshland, Adolph	4710	National Grocer Co.	4749
Nachman, L. S.	4710	Twitchell-Champlin Co.	4749
pork and:		Peppers, Mexican chili:	
Thomas Canning Co.	4715	Armengol, J.	4717
Underwriters' Salvage Co.	4724	Pulp, tomato. <i>See</i> Tomato pulp.	
Wisconsin Pea Canners' Co.	4712	Salad, onion:	
Brandy,		Bay State Relish Co.	4745
cognac:		Sparkling nebiolo. <i>See</i> Wine.	
Voltter, Adolph	4732	Stramonium leaves:	
Butter, apple:		Anderson, P. E., & Co.	4728
Smucker, J. M.	4721	Street's onion salad. <i>See</i> Salad.	
Champagne. <i>See</i> Wine.		Tabonucol-pectoratol:	
Chippewa natural spring water. <i>See</i> Water.		Porto Rico Pharmaceutical	
Cognac. <i>See</i> Brandy.		Specialty Co.	4706
Condensed milk. <i>See</i> Milk.		Tankage. <i>See</i> Feed.	
Cordial,		Throat and lung balsam. <i>See</i> Balsam.	
liquore St. Rega:		Apple waste:	N. J. No.
Voltter, Adolph	4732	Thompson, A. J.	4792
Depurativo Carson universal:		Apples, canned:	
Guardias Ointment Co.	4731	Consolidated Grocery Co.	4787
Kane & Behrens	4731	Athlophoros:	
Depurativo guardias:		Athlophoros Co.	4756
Guardias Ointment Co.	4731	Balm, Brazilian:	
Eggs:		Jackson, B. F., & Co.	4764
Stolle, Dangel, & Foss Co.	4725	Beans, pork and:	
Extract,		Dver Packing Co.	4791
malt and hops:		Elyria Canning Co.	4757
Bromstaff Malt Extract Co.	4722	4780, 4785, 4786, 4788.	4790
Ebling Brewing Co.	4722	Hart Bros.	4789,
vanilla:		Morris, David, & Son	4795
Gallagher, E. B. & Co.	4723	Morris, W. E.	4752
Fava beans. <i>See</i> Beans.		Brazilian balm:	
Feed,		Jackson, B. F., & Co.	4752
dairy:		Butter:	
Kirkland Distributing Co.	4714	Merchants Cold Storage &	
Wade, John, & Sons	4714	Warehouse Co.	4764
stock:		Calcium,	
Akron Feeding & Milling Co.	4703	wafer compound:	
tankage:		Stuart, F. A., Co.	4779
Farmers' Fertilizer Co.	4705	wafers:	
Fish, herring, smoked:		St. John, H. W., Co.	4782
Benson, W. R.	4735	Stuart & Co.	4774
Cossabon, Angus	4742	Stuart, F. A., Co.	4775
Fruit, dried:		Cloves:	
Bauermeister, C. W., Co.	4744	Sparks, W. J.	4777
Gray mineral water:		Vero A. Chemical Co.	4778
Baird, Wm., & Son	4733	Cocoa:	
Herring. <i>See</i> Fish.		Mever & Carmody Import	
King's, Dr., throat and lung balsam:		Co.	4783
King Medicine Co.	4713, 4719	milk:	
Ritchey Portrait Co.	4713, 4719	Croft & Allen Co.	4751
Lard:		Compound, Stuart's calcium wafer:	
Gruber, A. E.	4748	Stuart, F. A., Co.	4782
McDade, A. G.	4748	Condensed milk. <i>See</i> Milk.	
Liquore St. Rega:		Cottonseed meal:	
Voltter, Adolph	4732	Buckeye Cotton Oil Co.	4793
Lung balsam. <i>See</i> Balsam.		Croft's milk cocoa:	
Malt and hops extract. <i>See</i> Extract.		Croft & Allen Co.	4751
Mexican chili peppers. <i>See</i> Peppers.		Dried red peppers. <i>See</i> Peppers.	
Milk, condensed:		Feed,	
Holland Food Corporation	4740	cottonseed meal:	
Mineral water. <i>See</i> Water.		Buckeye Cotton Oil Co.	4793
Moscato. <i>See</i> Wine.		oats:	
		Tennessee Grain Co.	4799

Fish, tuna, canned:	N. J. No.	Barrell's Indian liniment:	N. J. No.
National Wholesale Grocery Co.	4796, 4797	Cary, H. G. O., Medicine Co.	4848
Kidney remedy. <i>See Remedy.</i>		Bitters, stomach:	
Liver and kidney remedy. <i>See Remedy.</i>		Arrow Distilleries Co.	4845
Milk, condensed:		Brandy, cognac:	
American Milk Co.	4794	Blum, J., jr., Sons	4841
Holland Food Corporation	4772	vodka:	
Morris & Co.	4800	Russian Monopol Co.	4830
Mustard seed. <i>See Seed.</i>		Caffeine tablets. <i>See Tablets.</i>	
Oats. <i>See Feed.</i>		Champagne, apple. <i>See Wine.</i>	
Oil, olive:		Cholera mixture. <i>See Mixture.</i>	
Carnese, A.	4784	Cider:	
Heller, Anna	4776	I. S. Fine Corporation	4813
Venice Importing Co.	4776	Cocoa cola:	
Olive oil. <i>See Oil.</i>		Coco Cola Co.	4801
Olives:		(Suppl. to 1455, 4032.)	
Moscahlades Bros.	4762	Cocoa almonds. <i>See Confectionery.</i>	
Paste, tomato. <i>See Tomato paste.</i>		Coffee:	
Peas, canned:		Hills Bros.	4820
National Wholesale Grocery Co.	4755	Jones-Thierbach Co.	4815
Peppers, dried red:		Cognac. <i>See Brandy.</i>	
Chieves, James, & Co.	4753	Compound, Henry's red gum:	
Pork and beans. <i>See Beans.</i>		McNulty, H. L.	4831
Pulp, tomato. <i>See Tomato pulp.</i>		Confectionery, cocoa almonds:	
Pumpkin, canned:		New England Confectionery Co.	4805
National Wholesale Grocery Co.	4755	jelly beans:	
Red peppers. <i>See Peppers.</i>		National Candy Co.	4806
Remedy, liver and kidney:		New England Confectionery Co.	4807
National Remedy Co.	4754	Cordial, orange curacao:	
Scallops:		Lyons, E. G., & Raas Co.	4809
Boulter, Charles	4767	Corn and sugar sirup. <i>See Sirup.</i>	
Dixon, Joseph, & Son	4761	Cottonseed meal. <i>See Feed.</i>	
Mason, P. B.	4766	Curacao, orange. <i>See Cordial.</i>	
Merrill, Z. L., & Co.	4760	Eckman's alterative:	
Morehead City Seafood Co.	4768	Eckman Mfg. Co.	4816
Piner, L. K.	4758	Eden, Dr. J. L. Kellett's oil of:	
Salter, V. F.	4765	California Cooperative Medicine Co.	4846
Wade, C. H.	4759	Eden, Dr. J. L. Kellett's sweet spirits of:	
Seed, mustard:		California Cooperative Medicine Co.	4846
Nachman, L. S.	4798	Egg, frozen:	
North American Mercantile Co.	4798	Smithson, Robert	4802,
Stuart's calcium wafer compound:			4803, 4804
Stuart, F. A., Co.	4782	Extract, orange:	
calcium wafers:		Thomson & Taylor Spice Co.	4808
St. John, H. W., Co.	4774	peppermint:	
Stuart & Co.	4775	Thomson & Taylor Spice Co.	4808
Stuart, F. A., Co.	4773	Feed, cottonseed meal:	
Swan's, Dr., liver and kidney remedy:		Rapier Sugar Feed Co.	4821
National Remedy Co.	4754	horse:	
Tomato, paste:		Byrnes, W. J., & Co.	4835
Parodi, Erminio & Co.	4781	oats:	
pulp:		Marshall, Hall & Waggoner Grain Co.	4818
Andrews, W. P.	4770, 4777	tankage:	
Hartlove Packing Co.	4769	Swift & Co.	4850
Tuna fish, canned. <i>See Fish.</i>		Female panacea. <i>See Panacea.</i>	
Vinegar:		Frozen egg. <i>See Egg.</i>	
Gist-Leo Vinegar Co.	4763	Gelatin pills. <i>See Pills.</i>	
Harbauer Co.	4771	Gerstle's female panacea:	
Wafers, calcium:		Gerstle Medicine Co.	4837
St. John, H. W., Co.	4774	Gum compound, red. <i>See Compound.</i>	
Stuart & Co.	4775	Henry's red gum compound:	
Stuart, F. A., & Co.	4773	McNulty, H. L.	4831
Abbott Bros. rheumatic remedy:		Horse feed. <i>See Feed.</i>	
Abbott Bros. Co.	4842	Indian liniment. <i>See Liniment.</i>	
Acetanilide tablets. <i>See Tablets.</i>		Injection, amber:	
Acetphenetidin tablets. <i>See Tablets.</i>		Thacher Medicine Co.	4838
Almonds, cocoa. <i>See Confectionery.</i>		Irish whisky. <i>See Whiskey.</i>	
Alterative, Eckman's:		Jack Johnson made wine. <i>See Wine.</i>	
Eckman Mfg. Co.	4816	Jamaica rum. <i>See Rum.</i>	
Amber injection. <i>See Injection.</i>		Jelly beans. <i>See Confectionery.</i>	
Apple champagne. <i>See Wine.</i>		Kellett's, Dr. J. L., oil of Eden:	
Apples:		California Cooperative Medicine Co.	4846
Johnson, J., & Co.	4822	sweet spirits of Eden:	
dried:		California Cooperative Medicine Co.	4846
Davidson Bros.	4829	Liniment, Barrell's Indian:	
evaporated:		Cary, H. G. O., Medicine Co.	4848
Ozark Apple Co.	4833		
Athlophoros:			
Athlophoros Co.	4834		

	N. J. No.		N. J. No.
Liver and blood sirup. <i>See</i> Sirup.		Sirup, corn and sugar:	
Mace:		Union Starch & Refining Co.	4827
Woolson Spice Co.-----	4812	liver and blood:	
Man's remedy, turpentine. <i>See</i> Remedy.		Thacher Medicine Co.-----	4828
Maple sirup. <i>See</i> Sirup.		Sirup, rock maple:	
Meal, cottonseed. <i>See</i> Feed.		Leslie Dunham & Co.-----	4819
Mixture, cholera:		sugar and maple:	
Thacher Medicine Co.-----	4838	Goulding Bros. -----	4843
Mustard:		Spirits of Eden, Dr. J. L. Kellett's sweet:	
Thomson & Taylor Spice Co. -----	4811	California Cooperative Medicine Co. -----	4846
Nutmegs:		Sprouts:	
Wixon Spice Co.-----	4825	Northwestern Malt & Grain Co. -----	4823
Oats. <i>See</i> Feed.		Stomach bitters. <i>See</i> Bitters.	
Ohio port wine. <i>See</i> Wine.		Sugar sirup. <i>See</i> sirup.	
Oil of Eden, Dr. J. L. Kellett's:		Tablets, acetanilid:	
California Cooperative Medicine Co. -----	4846	Norwich Pharmacal Co.----	4817
Orange curacao. <i>See</i> Cordial.		acetphenetidin:	
extract. <i>See</i> Extract.		Norwich Pharmacal Co.----	4817
Panacea, female:		caffeine:	
Gerstle Medicine Co.-----	4837	Norwich Pharmacal Co.----	4817
Pectoral plaster. <i>See</i> Plaster.		Tankage. <i>See</i> Feed.	
Pepper:		Texas wonder:	
Blanke, C. F., Tea & Coffee Co. -----	4844	Hall, E. W.-----	4840
Wixon Spice Co.-----	4810	Thacher's, Dr., amber injection:	
Peppermint extract. <i>See</i> Extract.		Thacher Medicine Co.-----	4838
Pills, gelatin:		cholera mixture:	
Norwich Pharmacal Co.---	4817	Thacher Medicine Co.-----	4828
pink:		liver and blood sirup:	
Williams, Dr., Medicine Co.-----	4849	Thacher Medicine Co.-----	4838
Pink pills. <i>See</i> Pills.		Tomato pulp:	
Plaster, pectoral:		Vecchi, Luigi -----	4836
Raymond & Co.-----	4839	Turpentine man's remedy:	
Port wine, Ohio. <i>See</i> Wine.		Tydings, C., & Co.-----	4832
Pulp, tomato. <i>See</i> Tomato.		Tydings' remedy:	
Raymond's pectoral plaster:		Tydings, C., & Co.-----	4832
Raymond & Co.-----	4839	Vinegar:	
Red gum compound. <i>See</i> Compound.		Naas, G., & Sons Co.-----	4847
Remedy, rheumatic:		Purity Vinegar Works-----	4847
Abbott Bros. Co.-----	4842	Vodka. <i>See</i> Brandy.	
Turpentine man's:		Whisky, Irish:	
Tydings, C., & Co.-----	4832	Blum, A., jr., Sons-----	4841
Tydings:		Williams', Dr., pink pills:	
Tydings, C., & Co.-----	4832	Williams, Dr., Medicine Co.-----	4849
Rheumatic remedy. <i>See</i> Remedy.		Wine, apple champagne:	
Rice:		I. S. Fine Corporation-----	4813
Cluff, William, Co.-----	4814	Jack Johnson made:	
Rum, Jamaica:		Two Brothers Wine & Liquor Co.-----	4826
Blum, A., jr., Sons-----	4841	Ohio port:	
		Kelleys Island Wine Co.---	4824
		Wingold brand stomach bitters:	
		Arrow Distilleries Co.-----	4845

**REPORT OF THE BUREAU OF REGISTRATION OF NURSES
FOR OCTOBER, 1917.**

ANNA C. JAMMÉ, R.N., Director.

At the regular meeting of the State Board of Health, held October 6, the following nurses were granted the certificate as registered nurse, on the successful completion of the recent examination held August 22 and 23.

At this same meeting the following nurses were granted a certificate without examination, in accordance with section 8 of the law:

Laura Curtis (Colorado) -----	5913
Linda Mitschke (Kentucky) -----	5981
Emma Ohlendorf (Iowa) -----	5985

By action of the State Board of Health the training school in connection with the Fairmont Hospital has been placed upon the accredited list for one year. Graduates of this hospital are now eligible for examination and registration.

**Successful Applicants at the Examination for Registered Nurse, Held
August 22 and 23, 1917.**

1. Allen, Maude M., St. Mary's Hospital, San Francisco, Cal.
2. Alting, Elfie, St. Francis Hospital, San Francisco, Cal.
3. Anderson, Gertrude E., Clara Barton Hospital, Los Angeles, Cal.
4. Barday, Pearl C., The Ramona Hospital, San Bernardino, Cal.
5. Barnett, Anna Jane, Hospital of Good Samaritan, Los Angeles, Cal.
6. Beck, Clara M., Providence Hospital, Oakland, Cal.
7. Berry, Frieda, Lane Hospital, San Francisco, Cal.
8. Bessolo, Louisa, Los Angeles Infirmary, Los Angeles, Cal.
9. Bevan, Eleanor E., St. Francis Hospital, San Francisco, Cal.
10. Bishop, Charmian C., Fabiola Hospital, Oakland, Cal.
11. Bordes, Charlotte S., French Hospital, San Francisco, Cal.
12. Bracken, Katherine, San Francisco Hospital, San Francisco, Cal.
13. Brandy, Elsie V., O'Connor's Sanitarium, San Jose, Cal.
14. Bray, Ruth D., St. Francis Hospital, San Francisco, Cal.
15. Britner, Vinita E., University of California Hospital, San Francisco, Cal.
16. Brown, Orlena M., Mercy Hospital, Bakersfield, Cal.
17. Brown, Vesta D., Mater Misericordiae, Sacramento, Cal.
18. Brunson, Carolyn May, Loma Linda Sanitarium, Loma Linda, Cal.
19. Bussell, Elsie M., Burnett Sanitarium, Fresno, Cal.
20. Byers, Nelle M., Los Angeles County Hospital, Los Angeles, Cal.
21. Cahen, Marion A., Lane Hospital, San Francisco, Cal.
22. Carey, Rae, McNutt Hospital, San Francisco, Cal.
23. Cargile, Blanche Mae, French Hospital, San Francisco, Cal.
24. Casterline, Drusilla M., Samuel Merritt Hospital, Oakland, Cal.
25. Chamberland, Mary M., St. Mary's Hospital, San Francisco, Cal.
26. Chambers, Jean L., Methodist Hospital, Los Angeles, Cal.
27. Chaplin, Mable E., San Francisco Hospital, San Francisco, Cal.
28. Clayton, Lucy F., St. Luke's Hospital, San Francisco, Cal.
29. Colletta, Ella Vera, St. Francis Hospital, San Francisco, Cal.
30. Cuddeback, Stella, Los Angeles Infirmary, Los Angeles, Cal.
31. Cummings, Rose Viola, St. Luke's Hospital, San Francisco, Cal.
32. Curran, Lucy Rachael, French Hospital, San Francisco, Cal.
33. Dale, Martha C., Massachusetts General Hospital, Boston, Mass.
34. Davison, Beatrice Irene, St. Luke's Hospital, San Francisco, Cal.
35. De Shields, Maud L., French Hospital, San Francisco, Cal.
36. Dunn, Agnes Elizabeth, University of California Hospital, San Francisco, Cal.
37. Eades, Dora Lou, San Antonio Hospital, Ontario, Cal.
38. Englehardt, Marie J., St. Joseph's Hospital, Chicago, Ill.
39. Epp, Ida C., St. Mary's Hospital, San Francisco, Cal.
40. Esola, Louise Irene, Roosevelt Hospital, Berkeley, Cal.
41. Ferlin, Josephine, St. Joseph's Sanitarium, San Diego, Cal.
42. Flagg, Louise G., Lane Hospital, San Francisco, Cal.
43. Flanagan, Alice C., St. Francis Hospital, San Francisco, Cal.
44. Flanagan, Kathleen M., St. Francis Hospital, San Francisco, Cal.
45. Floyd, Bertha Lillian, California Hospital, Los Angeles, Cal.
46. Foote, Minnie Alta, Pacific Hospital, Los Angeles, Cal.
47. Frasche, Beatrice, St. Francis Hospital, San Francisco, Cal.
48. Frazier, Eleanor M., St. Mary's Hospital, San Francisco, Cal.
49. From, Ruby I., Union Labor Hospital, Eureka, Cal.
50. Gallagher, Sister M. Bernadette, St. Joseph's Hospital, San Diego, Cal.
51. Garretson, Eva L., Pasadena Hospital, Pasadena, Cal.
52. Guhl, Anna Margaret, Mercy Hospital, Bakersfield, Cal.
53. Gunnison, Alma V., Hahnemann Hospital, San Francisco, Cal.
54. Hall, Mary L., Toronto General Hospital, Toronto, Ontario, Canada.
55. Hassell, Maja K., Buena Vista Sanatorium, San Francisco, Cal.
56. Hayward, Alice E., Fabiola Hospital, Oakland, Cal.

57. Hubert, Esta E., Lane Hospital, San Francisco, Cal.
58. Hunter, Dora, Burnett Sanitarium, Fresno, Cal.
59. Husu, Lydia Anna, Alta Bates Sanatorium, Berkeley, Cal.
60. Irvin, Elsie Derby, Lane Hospital, San Francisco, Cal.
61. Jackson, Ella Louise T., San Francisco Hospital, San Francisco, Cal.
62. Jamfrey, Ellen, Los Angeles County Hospital, Los Angeles, Cal.
63. Jessen, Emma Constance, Good Samaritan Hospital, Los Angeles, Cal.
64. Johnson, Ella M., Union Labor Hospital, Eureka, Cal.
65. Kellogg, Katherine E., Post Graduate Hospital, Chicago, Ill.
66. Kelsey, Grace N., Clara Barton Hospital, Los Angeles, Cal.
67. Kemp, Marjorie A., Good Samaritan Hospital, Los Angeles, Cal.
68. Kibler, Margaret, Clara Barton Hospital, Los Angeles, Cal.
69. Kennedy, Grace M., St. Luke's Hospital, San Francisco, Cal.
70. Kincaid, Charlotte L., St. Francis Hospital, San Francisco, Cal.
71. Koch, Henrietta S., Fabiola Hospital, Oakland, Cal.
72. Kreiss, Flora R., German Hospital, San Francisco, Cal.
73. La Fleura, Zadee V., St. Luke's Hospital, San Francisco, Cal.
74. Lawrence, Edna M., Pomona Valley Hospital, Pomona, Cal.
75. Levy, Stella, Lane Hospital, San Francisco, Cal.
76. Lindauer, Florence B., French Hospital, San Francisco, Cal.
77. Littlejohn, Leota R., French Hospital, San Francisco, Cal.
78. Lukaschek, Hermine, St. Luke's Hospital, San Francisco, Cal.
79. Lindenberger, Ruth G., Riverside Hospital, Riverside, Cal.
80. Lundholm, Ruth V., Samuel Merritt Hospital, Oakland, Cal.
81. Macy, Ethel, St. Francis Hospital, San Francisco, Cal.
82. Madison, Eda A., Bismarck Hospital, Bismarck, North Dakota.
83. Maichel, Pauline T., Clara Barton Hospital, Los Angeles, Cal.
84. Malloy, Martha, Los Angeles Infirmary, Los Angeles, Cal.
85. Marston, Vera, University of California Hospital, San Francisco, Cal.
86. Martin, June Esther, Lane Hospital, San Francisco, Cal.
87. McAlonan, Helen, Los Angeles Infirmary, Los Angeles, Cal.
88. McCort, Florence, Mercy Hospital, Bakersfield, Cal.
89. McDonald, Minnie E., Lane Hospital, San Francisco, Cal.
90. McDowell, Irene E., San Francisco Hospital, San Francisco, Cal.
91. Monroe, Emily L., Providence Hospital, Oakland, Cal.
92. Morris, Leona R., Samuel Merritt Hospital, Oakland, Cal.
93. Munroe, Edith Lucille, Samuel Merritt Hospital, Oakland, Cal.
94. Nittler, Anastasia M., East Bay Sanatorium, Oakland, Cal.
95. Niven, Christian M., Pasadena Hospital, Pasadena, Cal.
96. Nott, Pauline M., St. Luke's Hospital, San Francisco, Cal.
97. O'Connor, Elizabeth F., St. Joseph's Hospital, San Diego, Cal.
98. Olsen, Marie, St. Luke's Hospital, San Francisco, Cal.
99. Olson, Louise, Pacific Hospital, Los Angeles, Cal.
100. Osterberg, Esther M., Clara Barton Hospital, Los Angeles, Cal.
101. Outram, Grace D., Samuel Merritt Hospital, Oakland, Cal.
102. Peterson, Delia M., Samuel Merritt Hospital, Oakland, Cal.
103. Porter, Edna D., Children's Hospital, San Francisco, Cal.
104. Porterfield, Mable R., Angelus Hospital, Los Angeles, Cal.
105. Pratt, Romania, California Hospital, Los Angeles, Cal.
106. Randig, Frieda A., Buena Vista Hospital, San Francisco, Cal.
107. Rogerson, Jean, Good Samaritan Hospital, Los Angeles, Cal.
108. Rolfe, Grace Woodman, Riverside Hospital, Riverside, Cal.
109. Roper, Elsie F., Royal Victoria Hospital, Montreal, Quebec.
110. Rother, Sara F., Samuel Merritt Hospital, Oakland, Cal.
111. Rowe, Effie M., Jefferson Medical College Hospital, Philadelphia, Pa.
112. Sandford, Georgina Wills, St. Luke's Hospital, San Francisco, Cal.
113. Scharkopf, Jeanie C., St. Mary Abbotts Infirmary, London, England.
114. Shandburg, Signa J., Methodist Hospital, Los Angeles, Cal.
115. Shanley, Sister Mary Thomas, St. Joseph's Hospital, San Diego, Cal.
116. Sheehan, Honora Cecelia, St. Mary's Hospital, San Francisco, Cal.
117. Sher, Nettie, Angelus Hospital, Los Angeles, Cal.
118. Simi, Frances E., St. Luke's Hospital, San Francisco, Cal.
119. Sneed, Frances E., Clara Barton Hospital, Los Angeles, Cal.
120. Springer, Faithe M., St. Luke's Hospital, San Francisco, Cal.
121. Spurr, Edith, St. Winifred's Hospital, San Francisco, Cal.
122. Standen, Hilda M., University of California Hospital, San Francisco, Cal.
123. Stapleton, Florence P., Pasadena Hospital, Pasadena, Cal.
124. Steel, Elsie M., Launceston General Hospital, Launceston, Tasmania.
125. Steel, Mabel, Sydney Hospital, Sydney, New South Wales.
126. Struthers, Mary Lucille, Los Angeles County Hospital, Los Angeles, Cal.
127. Sumner, Frances P., Lane Hospital, San Francisco, Cal.
128. Talbot, Myrtle M., St. Luke's Hospital, San Francisco, Cal.
129. Talcott, Olive T., Welsey Hospital, Chicago, Ill.
130. Tompkin, Minnie, San Francisco Hospital, San Francisco, Cal.
131. Van Cluff, Flora D., Los Angeles County Hospital, Los Angeles, Cal.
132. Waechter, Emma M., Fabiola Hospital, Oakland, Cal.
133. Waechter, May M., Fabiola Hospital, Oakland, Cal.
134. Wilkins, Sue N., University of California Hospital, San Francisco, Cal.
135. Williams, Alice M., Samuel Merritt Hospital, Oakland, Cal.
136. Williams, Elma E., Lane Hospital, San Francisco, Cal.
137. Williston, Frances, St. Joseph's Hospital, Victoria, B. C.
138. White, Edna May, French Hospital, San Francisco, Cal.
139. White, Lydia L., San Francisco Hospital, San Francisco, Cal.
140. Wood, Charlotte Edna, Mount Zion Hospital, San Francisco, Cal.
141. Wright, Belinda J., St. Mary's Hospital, San Francisco, Cal.
142. Young, Lena, The Burnett Sanitarium, Fresno, Cal.

LIST OF COUNTY AND CITY HEALTH OFFICERS.

Alameda County—		Kern County—		
Dr. J. Hal Cope	Pleasanton	Dr. C. A. Morris	Bakersfield	
Alameda	Dr. A. Hieronymus	Bakersfield	Dr. P. J. Cuneo	
Albany	Dr. J. F. Diddle	Delano	Dr. J. R. Hicks	
Berkeley	Dr. J. J. Benton	Maricopa	Dr. H. N. Taylor	
Emeryville	Dr. A. T. Drennan	McKittrick	Dr. Robert C. Dear	
Hayward	Dr. F. W. Browning	Taft	Dr. E. A. D. Jones	
Livermore	Dr. J. K. Warner	Tehachapi	Dr. N. J. Brown, Jr.	
Oakland	Dr. Kirby B. Smith	Kings County—	Dr. C. L. Scott	Hanford
Piedmont	Dr. Benj. T. Mouser	Corcoran	Dr. J. T. Peery	
Pleasanton	Dr. J. Hal Cope	Hanford	Dr. B. Robbins	
San Leandro	Dr. Luther Michael	Lemoore	Dr. W. P. Byron	
Alpine County—	Mr. Fred S. Dunlap	Lake County—	Dr. W. E. Upton	Kelseyville
Amador County—	Dr. G. L. Lynch	Lakeport	P. H. Millberry	
Jackson	Amador City	Lassen County—	Dr. W. E. Dozier	Susanville
Plymouth	H. E. Kay	Susanville	Dr. F. D. Walsh	
Sutter Creek	W. J. Ninnis	Los Angeles County—	Dr. C. R. Dirks, acting	Los Angeles
Butte County—	W. A. Burres	Alhambra	Dr. F. E. Corey	
Dr. L. L. Thompson	Gridley	Arcadia	Dr. Chas. D. Gaylord	
Biggs	R. W. Simmons	Avalon	Dr. J. J. Peckham	
Chico	W. H. Marshall	Azusa	Dr. John E. Hill	
Gridley	Dr. L. Q. Thompson	Beverly Hills	Dr. Lowell G. Frost	
Oroville	Dr. W. F. Gates	Burbank	Dr. E. H. Thompson	
Calaveras County—	Dr. George F. Pache, Angels Camp	Claremont	Dr. F. W. Thomas	
Angels Camp	Dr. E. W. Weirich	Compton	E. E. Elliott	
Colusa County—	Dr. G. W. Desrosier	Covina	Dr. J. D. Reed	
Colusa	Colusa	Eagle Rock	Dr. C. H. Phinney	
Contra Costa County—	Dr. G. W. Desrosier	El Monte	Dr. S. L. Corpe	
Dr. W. S. George	Antioch	El Segundo	R. F. Davis	
Antioch	Dr. W. S. George	Glendale	Dr. R. E. Chase	
Concord	Dr. F. F. Neff	Glendora	Dr. L. N. Suydam	
Hercules	H. N. Belgener	Hermosa Beach	B. F. Brown	
Martinez	Dr. Edwin Merrithew	Huntington Park	Dr. W. Thompson	
Pinole	Dr. M. L. Fernandez	Inglewood	Dr. H. A. Putnam	
Pittsburg	Dr. H. E. Peters	Long Beach	Dr. R. L. Taylor	
Richmond	Dr. Chas. R. Blake	Lordsburg	Dr. J. E. Hubble	
Walnut Creek	Dr. C. R. Leech	Los Angeles	Dr. L. M. Powers	
Del Norte County—	Dr. E. M. Fine	Manhattan Beach	Llewellyn Price	
Crescent City	Crescent City	Monrovia	Dr. Chas. D. Gaylord	
Crescent City	Dr. E. M. Fine	Monterey Park	Dr. J. S. Trewhella	
El Dorado County—	Dr. S. H. Rantz	Pasadena	Dr. Stanley P. Black	
Placerville	Placerville	Pomona	Dr. N. J. Rice	
Fresno County—	G. H. Wickes	Redondo Beach	Dr. D. R. Hancock	
Dr. G. L. Long	Fresno	San Fernando	Dr. Benj. B. Ward	
Clovis	Dr. M. S. McMurtry	San Gabriel	Dr. Ruth Purcell	
Coalinga	Dr. C. W. Hutchison	San Marino	Dr. W. LeMoine Wills	
Firebaugh	Dr. H. J. Greven	Santa Monica	Dr. F. J. Wagner	
Fowler	Chas. Chapman	Sawtelle	Dr. A. B. Hromadka	
Fresno	Dr. C. Mathewson	Sierra Madre	Dr. R. H. Mackerras	
Kingsburg	Dr. J. A. Gillespie	South Pasadena	Dr. C. F. Metcalf	
Reedley	Dr. Chas. H. Traber	Tropico	Dr. Wm. C. Mabry	
Sanger	Dr. Thos. F. Madden	Venice	Dr. W. M. Kendall	
Selma	Dr. Fred H. Williams	Vernon	Dr. O. R. Stafford	
Glenn County—	Dr. F. M. Lawson	Watts	Dr. E. J. Riche	
Orland	Willows	Whittier	Dr. W. H. Stokes	
Willows	Dr. S. Iglick	Madera County—	Dr. L. St. John Hely	Madera
Humboldt County—	Dr. W. H. Walker	Madera	Dr. L. St. John Hely	
Dr. Joseph Walsh	Eureka	Marin County—	Dr. J. H. Kuser	Novato
Arcata	Dr. G. W. McKinnon	Belvedere	Dr. Florence Scott	
Blue Lake	Dr. Chas. N. Mooney	Corte Madera		
Eureka	Dr. L. A. Wing	Larkspur	J. R. McGuffick	
Ferndale	Dr. A. P. Griffin	M'Il Valley	James V. Chase	
Fortuna	Dr. Orville Rockwell	Ross	Dr. Thos. U. Smyth	
Imperial County—	Dr. R. K. McGuffin	San Anselmo	Dr. O. W. Jones	
Brawley	Imperial	San Rafael	Dr. W. F. Jones	
Calexico	Dr. Eugene Le Baron	Sausalito	Dr. Allen H. Vance	
El Centro	Dr. W. L. Ellis	Mariposa County—	Dr. F. L. Wright	Mariposa
Holtville	Dr. F. A. Burger	Mendocino County—	Dr. S. L. Rea	Ukiah
Imperial	C. A. Johnston	Fort Bragg	Dr. L. C. Gregory	
Inyo County—	Dr. R. K. McGuffin	Point Arena	Conrad Nicks	
Dr. I. J. Woodin	Independence	Potter Valley	W. T. Eddie	
Bishop	John B. Clarke	Ukiah	Dr. Lew K. Van Allen	
		Willits	Dr. F. C. Gunn	

LIST OF COUNTY AND CITY HEALTH OFFICERS—Continued.

Merced County—	San Francisco (city and county)—
Dr. J. L. Mudd-----Merced	Dr. W. C. Hassler---San Francisco
Gustine-----Dr. C. E. Stagner	San Joaquin County—
Los Banos-----Dr. R. Jadarola	Dr. John T. Davison---Stockton
Merced-----Dr. H. Kylberg	Lodi-----Dr. S. W. Hopkins
Modoc County—	Stockton-----Dr. Linwood Dozier
Dr. W. H. Coppedge-----Alturas	Tracy-----Dr. J. G. Murrell
Alturas-----Dr. John Stile	San Luis Obispo County—
Mono County—	Dr. C. J. McGovern---San Luis Obispo
Dr. C. W. Wood-----Bridgeport	Arroyo Grande-----Dr. H. A. Gallup
Monterey County—	Paso Robles-----T. A. Hurley
Dr. J. A. Beck-----Salinas	San Luis Obispo-----W. F. Cook
King City-----Dr. D. Brumwell	San Mateo County—
Monterey-----C. A. Kiernan	Dr. F. Holmes Smith---San Bruno
Pacific Grove-----James P. Evans	Burlingame-----Dr. Jane H. Parkhurst
Salinas-----W. E. Hallock	Daly City -----Dr. A. H. Rankin
Napa County—	Hillsborough-----C. M. Hirschey
Dr. O. T. Schulze-----Napa	Redwood City-----Dr. J. L. Ross
Calistoga-----L. Randall	San Bruno-----Dr. F. Holmes Smith
Napa-----Alex. Hull	San Mateo-----W. C. McLean
St. Helena-----J. G. Johnson	So. San Francisco---Dr. J. C. McGovern
Nevada County—	Santa Barbara County—
Dr. Carl P. Jones---Grass Valley	Dr. G. S. Lovern---Santa Barbara
Grass Valley-----Dr. G. E. Chappell	Lompoc-----Dr. C. B. Constable
Nevada City-----Geo. H. Calanan	Santa Barbara-----Dr. C. S. Stevens
Orange County—	Santa Maria-----Dr. O. P. Paulding
Dr. A. H. Domann---Santa Ana	Santa Cruz County—
Anaheim-----Dr. J. W. Truxaw	Dr. Wm. H. Keck---Santa Cruz
Brea-----Dr. W. W. Davis	Santa Cruz-----Dr. H. E. Piper
Fullerton-----Dr. J. H. Lang	Watsonville-----Dr. F. H. Koepke
Huntington Beach-----Dr. G. A. Shank	Santa Clara County—
Newport Beach-----J. A. Porter	Dr. Wm. Simpson---San Jose
Orange-----Dr. F. L. Chapline	Alviso-----Dr. J. I. Beattie
Santa Ana-----Dr. J. I. Clark	Gilroy-----Dr. J. W. Thayer
Seal Beach-----Dr. J. Park Dougall	Los Gatos-----Dr. R. Seldon Anthony
Stanton-----J. H. Swan	Mayfield-----Dr. F. M. Seibert
Placer County—	Morgan Hill-----Dr. W. D. Miner
Dr. John Manson-----Lincoln	Mountain View---Dr. A. H. MacFarlane
Auburn-----Dr. G. H. Fay	Palo Alto-----Louis Olson
Colfax-----Dr. R. A. Peers	San Jose-----Dr. D. A. Beattie
Lincoln-----F. R. Elder	Santa Clara-----Dr. G. W. Fowler
Rocklin-----Wm. H. Keeley	Sunnyvale-----Mrs. Norman Schofield
Roseville-----G. W. Lohse	Shasta County—
Plumas County—	Dr. S. T. White-----Redding
Dr. B. J. Lasswell-----Quincy	Coram-----
Riverside County—	Kennett-----Dr. J. P. Sandholt
Dr. James G. Baird-----Riverside	Redding-----E. A. Rolison
Banning-----Dr. L. M. Ryan	Sierra County—
Beaumont-----Dr. F. D. West	Dr. O. A. Eckhardt---Downieville
Blythe-----Dr. W. H. Chapman	Loyalton-----B. M. Wheeler
Corona-----Dr. W. S. Davis	Siskiyou County—
Elsinore-----	Dr. W. F. Shaw-----Yreka
Hemet-----Dr. H. O. Miller	Dorris-----Dr. A. A. Atkinson
Perris-----Dr. J. W. Reese	Dunsmuir-----Herman Woodward
Riverside-----Dr. C. W. Girdlestone	Etna-----Dr. W. H. Haines
San Jacinto-----Thomas Lloyd	Fort Jones-----S. R. Taylor
Sacramento County—	Montague-----Hugh W. French
Dr. J. H. Leimbaeh-----Isleton	Sisson-----Dr. Paul Wright
Sacramento-----Dr. G. C. Simmons	Yreka-----Dr. W. F. Shaw
San Benito County—	Solano County—
Dr. J. M. O'Donnell---Hollister	Dr. W. C. Jenney ----- Vacaville
Hollister-----Dr. J. M. O'Donnell	Benicia-----Dr. P. B. Fry
San Juan-----Joseph De Lucchi	Fairfield-----F. L. Morrill
San Bernardino County—	Rio Vista-----Dr. Albert F. Welin
Dr. L. M. Coy-----San Bernardino	Suisun-----Dr. A. G. Bailey
Chino-----Dr. Elgar Reed	Vacaville-----
Colton-----Dr. J. A. Champion	Vallejo-----Dr. E. A. Peterson
Needles-----Dr. A. S. Parker	Sonoma County—
Ontario-----Dr. Calvert L. Emmons	Dr. J. H. Shaw-----Santa Rosa
Redlands-----Dr. F. H. Folkins	Cloverdale-----E. E. Gibbons
Rialto-----Dr. L. P. Barbour	Healdsburg-----Dr. J. W. Seawell
San Bernardino-----Dr. F. M. Gardner	Petaluma-----Dr. R. B. Duncan
Upland-----E. R. Bowman	Santa Rosa-----Dr. Jackson Temple
San Diego County—	Sebastopol-----Dr. J. B. Blackshaw
Dr. O. G. Wicherksi-----San Diego	Sonoma-----J. H. Albertson
Chula Vista-----Dr. Leila Latta	Stanislaus County—
Coronado-----Dr. Raffael Lorini	Dr. J. L. Hennemuth---Modesto
East San Diego-----Dr. C. R. Carpenter	Modesto-----Dr. J. W. Morgan
El Cajon-----Dr. Chas. R. Knox	Newman-----Dr. H. V. Armistead
Escondido-----Dr. B. L. Crise	Oakdale-----Dr. F. W. McKibbon
La Mesa-----Dr. L. W. Zochert	Turlock-----Dr. G. L. Wilson
National City-----Dr. Will L. Allen	
Oceanside-----Dr. R. S. Reid	
San Diego-----Dr. A. E. Banks	

List of Diseases Reportable by Law

Anthrax	Ophthalmia Neonatorum
Beri-beri	Paratyphoid Fever
Cerebrospinal Meningitis (Epidemic)	Pellagra
Chickenpox	Plague
Cholera, Asiatic	Pneumonia (Lobar)
Dengue	Poliomyelitis
Diphtheria	Rabies
Dysentery	Rocky Mountain Spotted (or Tick) Fever
Erysipelas	Scarlet Fever
German Measles	Smallpox
Glanders	*Syphilis
*Gonococcus Infection	Tetanus
Hookworm	Trachoma
Leprosy	Tuberculosis
Malaria	Typhoid Fever
Measles	Typhus Fever
Mumps	Whooping-cough
	Yellow Fever

*Reported by office number. Name and address not required.

Quarantinable Diseases

Cerebrospinal Meningitis (Epidemic)	Poliomyelitis
Cholera, Asiatic	Scarlet Fever
Diphtheria	Smallpox
Leprosy	Typhus Fever
Plague	Yellow Fever

Section 16, Public Health Act. All physicians, nurses, clergymen, attendants, owners, proprietors, managers, employees, and persons living in or visiting any sick person in any hotel, lodging house, house, building, office, structure, or other place where any person shall be ill of any infectious, contagious, or communicable disease, shall promptly report such fact to the county, city and county, city, or other local health board or health officer, together with the name of the person, if known, and place where such person is confined, and nature of the disease, if known.

QMOST emphatically I agree with you in protecting the army from commercialized vice and forbidding all recognition of commercialized vice, and all encouragement, direct or indirect, of commercialized vice, by or in connection with the army. This is especially true of the army now to be raised. **Q**When our troops go to war our effort must be to appeal to their sense of self-respect and of duty; let us effectively endeavor to make them realize that it should be a matter of honorable obligation on them to live cleanly and decently, keeping themselves fit to be citizens when they return home, and at the highest pitch of fighting capacity while the war lasts.

—Roosevelt.

PROF. WM. P. LUCAS,
MED. DEPT. CAL. UNIVERSITY,
SAN FRANCISCO, CAL.